AMERICAN FOUNDATION
FOR THE BLIND INC.

c.7

Digitized by the Internet Archive
in 2010 with funding from
Lyrasis Members and Sloan Foundation

http://www.archive.org/details/proceedingsofame00unse

HV1788
A

Thirty-fifth

biennial convention

AMERICAN ASSOCIATION OF INSTRUCTORS OF THE BLIND

BL 6637 (-) Res

1940

JUNE 24th to JUNE 28th

WESTERN PENNSYLVANIA SCHOOL FOR THE BLIND

PITTSBURGH, PENNSYLVANIA

OFFICERS

J. S. GANEY, President	Talladega, Alabama
ROBERT W. WOOLSTON, Vice President	Jacksonville, Illinois
JOSEF G. CAUFFMAN, Secretary-Treasurer	Lansing, Michigan

EXECUTIVE COMMITTEE

W. G. SCARBERRY, Chairman	Columbus, Ohio
ROBERT D. MORROW	Tucson, Arizona
PAUL J. LANGAN	Overlea, Maryland
W. W. SPELLINGS	Nashville, Tennessee
HAROLD W. WRIGHT	New York, New York
J. S. GANEY, Ex Officio	Talladega, Alabama
JOSEF G. CAUFFMAN, Ex Officio	Lansing, Michigan

LIST OF SPEAKERS

	Page
Anderson, Mrs. Louise	33
Andrews, Francis M.	54-213
Ash, Florence	123
Askar, Riad	85
Baker, Col. E. A.	195
Barnes, Elda M.	97
Barnhart, Robert	76
Best, Lester	132
Bledsoe, Supt. John	226
Botts, J. H.	161
Bradley, Grace	178
Brown, Supt. A. L.	30
Bushan, Violet M.	121
Cauffman, J. G.	237
Chadderdon, W. E.	55
Chatfield, Mrs. Alice	52
Clunk, J. F.	141
Connelly, Eugene LeMoyne	11
Coville, Mrs. M. Genevieve	206
Cowgill, Albert G.	73
Cox, Lois V.	106
Drys, Supt. Walter L.	98
Ellis, A. C.	232
Farrell, Dr. Gabriel	17
Foster, Doris E.	111
Frampton, Dr. M. E.	20-242
Garney, Supt. J. S.	13
Hayes, Dr. Samuel P.	185
Hill, O. J.	145
Holcomb, Katherine D.	94
Horch, Mrs. Doris	112
Hough, Bassett W.	61
Irwin, Robert B.	217
Jones, Irene	153
King, Etta F.	35
Koehne, Grace	49
Lambert, Robert	199
Leive, Mabel Claire	126
Lineberry, Supt. G. E.	205
Long, R. E.	173
Lowenfeld, Berthold	221
Lysen, J. C.	201
Mitchell, Paul C.	171
Mudalier, Natesh	28
Mulligan, Robert	116
Newman, Oscar	46
Niday, W. Raymond	150
Norton, Miss Maurice	104
Overbeay, Donald W.	175
Palmer, Eber L.	12
Parr, Annie Ruth	238
Peterson, Edwin G.	158-238
Peterson, Olene R. N.	89
Post, Dorothy O.	135
Potts, P. C.	139
Quimby, Neal F.	133
Reid, Mrs. Alma	182
Rice, George N.	70
Roznowski, Frank J.	117
Scarberry, Supt. W. G.	235
Schorpp, Mildred L.	188
Shah, Amal D. S. M.	22
Smith, L. M.	9
Spellings, W. W.	46
Stephenson, H. G.	72
Stoltz, Elizabeth L.	68
Theron, P. T.	191
Totman, Harriet E.	78
Walker, Louisa	42
Waterhouse, Edward J.	148
Waterhouse, Mrs. Sina V.	101
Wilber, Dr. Louise	37
Woods, Armeada	129
Woodward, Mrs. Rice	59
Woolston, Pres.	244
Woolston, Supt. Robert L.	166

TABLE OF CONTENTS

Page

Address of Welcome 11
Address of Welcome, Response to 12
American Foundation for the Blind, Report of the 217
American Printing House for the Blind, Report of the 232
Annual Uniform Statistical Report for Residential Schools for the Blind 206
Attitudes and Methods in Science, Some Ways of Teaching 171
Auditing Committee, Report of the 238
Blind in Mathematics, Time Saving Methods for the 55
Blind in South Africa, The Education of the 191
Braille Committee, Report of the 213
Capitalizing the Value of Models to Meet the Demands of the Current Trend in Primary Education 52
Certification Committee, Report of the 205
Commercial Training in Schools for the Blind—Vocational and Pre Vocational, Aims of 30-33
Common Cultural Relationships with South American 20
Correlating English and Typing, The Best Method of 35
Course in Piano Tuning, Educational Values of A 70
Credentials Committee, Report of the 199
Dr. Hayes' Paper with Special Emphasis on the Influence of a Language Handicap on Mental Testing, Discussion of 188
Dramatics in the Oklahoma School for the Blind 104
Employment Possibilities for Blind Piano Tuners 72
Employment Possibilities—Old And New 139-141
Enrichment Through Models 148
Executive Committee in Relation to Coordination Between the A.A.W.B. and the A.A.I.B., Report of the 227
Executive Committee Report 235
Extent and Importance of Laboratory Work in Biology Classes, The 158
Geography: A Human, Dynamic Study 46
Geography As An Aid in the Interpretation of History 49
Handicraft for the Retarded Blind, The Value of 123
History in the Modern World, the Function of 175
Home Teacher Meets the Pre-School and Post-School Child, The 153
How Can the Correlation of Class Work Be Made an Integral Part of the Lower Grades 37
How Home Economics Can Be Integrated With Other Subject Matter in Accomplishing the Desired Educational Aims 106
How May Music Be Made Better to Serve Individual Differences in Children 126
How Scaled Models Are Used to Teach the Blind 145
How Shall We Go About Testing in Our School 185
Importance of Diet in the Health of the Blind Child 89
Instructional Cost 166
Is It Advisable to Have Boys and Girls Assist with Household Duties? 98

TABLE OF CONTENTS

Page

Joint Findings Committee Representing the American Association of Instructors of the Blind and The American Association of Workers for The Blind, Progress Report of the 201

Justification of Large Expenditures on the Education of the Blind in The Light of Their Social and Economic Destiny, A Restatement of the 73

Laboratory in Science Classes—What Shall Be in It?, The Importance of A 173

Language Problems 182

Legislative Committee, Report of the 226

Methods of Instruction, New Trends in 221

Musical Education of the Blind 61

Nation Wide Survey of Braille Reading, Report of a 150

National Convention of Instructors of the Blind 9

Necrology Committee, Report of the 238

Physical and Mental Slump in the Intermediate Grades, Overcoming the 42

Discussion 46

President's Address 13

President Woolston's Speech 244

Proper Eating Habits, How Best Taught to the Blind Child 94

Radio in Schools for the Blind, The Use of the 76

Recording Machines As An Aid in Teaching Music 68

Reflections From an Ivory Tower 17

Resolutions Committee, Report of the 242

Secretary-Treasurer, Report of the 237

Sectional Meetings:

Biology 158

Business Management 166

Commercial 30

Dietetics and Health 89

Dormitory Management and Meeting of the Superintendent's Wives 97

English 101

General Science 169

Fourth, Fifth, and Sixth Grades 37

Geography 46

History 175

Home Economics 106

Industrial Arts 116

Kindergarten 52

Kindergarten, First, Second, and Third Grades 178

Mathematics 55

Music 61, 126

Panel Discussion and Round Table 185

Physical Education 133

Piano Tuning 70

TABLE OF CONTENTS

Page

Round Table 169
Superintendents, Principals, and Supervisors 73, 139
Singing as a Prime Influence on the Students of Residential Schools 129
Discussion 132
Speech Education in Schools for the Blind, The Importance of 101
Teaching Devices I Have Found Helpful in Presenting Foods, Clothing, Family Relationship, Nutrition, and Care of Younger Children 112
Teaching the Blind in Egypt 85
Teaching the Blind in India 28
To What Extent Should a Matron Act as an Advisor and Supervisor 97
Trades Training in Schools for the Blind, Advantages and Disadvantages of 117
Trends in Services for the Sightless 195
Types of Braille to Be Used in the Lower Schools 54
Upon What Points Are We Justified in Judging Desirable Industrial Activities in Schools for the Blind 116
Use of Apparatus in Teaching Junior and Senior School Mathematics in Schools for the Blind to Make the Subject Less Abstract, The 59
Visiting Teacher in the Social and Educational Adjustment of the Day-School Braille-Class Child, The Role of the 78
What Activities That May Be Taught in a Physical Educational Program May Be An Incentive for Leisure-Time Activities 133
What Features Should Be Considered in Selecting a Text in Biology for the Blind 161
What Material Value Is Industrial Arts Instruction to the Mass of Blind Youth Under the Present Blind Relief System 121
What Should Boys and Girls Do with Their Free Time in a Residential School for the Blind? 135
When and How Should Braille Writing Be Taught? 178
Work for the Blind in India 22

AMERICAN ASSOCIATION OF INSTRUCTORS OF THE BLIND

THIRTY-FIFTH BIENNIAL CONVENTION

Pittsburgh, Pennsylvania
JUNE 24 to JUNE 28, 1940

FIRST SESSION

MONDAY EVENING, JUNE 24, 1940

PRESIDENT J. S. GANEY, Presiding

Music

Invocation

Addresses of Welcome

Speech to National Convention of Instructors of the Blind — L. M. SMITH
Chief Medical Examiner, Pittsburgh Board of Education

Address of Welcome — EUGENE LeMOYNE CONNELLY
Western Pennsylvania School for the Blind

Response to Address of Welcome — EBER L. PALMER
Superintendent of New York State School for the Blind

President's Address: *"Some Fundamentals in the Education of the Blind"*
SUPERINTENDENT J. S. GANEY

Informal Reception

"SPEECH TO NATIONAL CONVENTION OF INSTRUCTORS OF THE BLIND"

L. M. SMITH

Chief Medical Examiner, Pittsburgh Board of Education, Pittsburgh, Pennsylvania

Mr. Presiding Officer, Ladies and Gentlemen of the Convention:

I am honored by being here tonight as a representative of the Superintendent of Pittsburgh's Public Schools, Dr. Ben G. Graham. On behalf of Dr. Graham, I greet you and invite you to visit some of our wonderful school buildings, and especially our administration building, which contains medical clinics that should be of great interest to you.

Pittsburgh has approximately 150,000 public and parochial school children. A quick resume of our health work should be of interest to you. Our physical education program with its gymnasiums, swimming pools, athletic fields, clinics, etc., represents approximately twenty per cent of our capital investment. We have thirty-nine school doctors working forenoon and afternoon, thirteen dental clinics with dentists and their assistants correcting teeth and teaching oral hygiene, thirty school nurses, and twenty college-trained social workers, acting as liaison individuals between the doctor and the hospital, the school and the home.

In the Board of Education, Administration Building, we have a medical diagnostic clinic for employees as well as school children. There is also an X-ray clinic, a psychological clinic and what would be of great interest to you, a refraction clinic. Mr. Joice, the superintendent of this school was instrumental in establishing this eye-refraction clinic. In attendance in the eye clinic we have two ophthalmologists and a nurse. The eye clinic operates eight hours a day and examines the eyes of about two-thousand indigent children annually. We also have a sight conservation class for children who are too bad in vision for the regular class room and yet not bad enough for entrance to the Western Pennsylvania School for the Blind. There are thirty children enrolled in this sight conservation class. There are thirty-six on the waiting list. We could well use at least another half-dozen sight conservation classes, in various parts of the city. Perhaps with the help of Mr. Joice, we can in the near future, establish more of these classes. We have a nurse group testing audiometer operator, who will be able to test the hearing of approximately twenty thousand school children annually. We also have a hearing conservation class for children of the same type who are too defective in hearing to function in the regular class room and not bad enough for a deaf institution.

We have established a system of home teaching for children who are physically incapacitated. Teachers are sent into the homes of children who suffer from epilepsy, heart disease, paralysis or any other condition that prevents them from attending regular classes. We have one especially trained teacher for children suffering from spastic paralysis. Spastic paralysis, as you know, is due to a birth injury. It develops as a result of brain hemorrhage at or near birth. We have nearly eight hundred mental deviates, attending orthogenic classes; in other words, mental deviate classes. Children are selected for these classes by our psychological department.

The word "psychology" brings to mind a story, which is appropriate. I believe every teacher in Pittsburgh has heard this story since I first told it in Pittsburgh, but since this audience is a national group, it should prove to be new. You know that psychologists and psychiatrists have a reputation among the layman of becoming queer.

A patient will say to you that such and such a psychiatrist is a little goofy himself. Psychologists and psychiatrists acquire this reputation because they ask what to the layman appears to be a very peculiar question. A high school teacher was attending the University at night, studying psychology. One day in his class room, he decided he would ask his children a catch question or trick question. He wanted to test their mental aptitude or mental reaction. He stated, "If the Atlantic Ocean laps the western shore of the United States and the Washington Monument is 565 feet high, how old am I?" Well, his class looked at him with open-eyed wonder and astonishment; they had never heard such a foolish question, but finally one little boy in the back of the room arose and said, "I know the answer. You are just forty-two years of age." The teacher said, "Johnny, that is correct. How in the world did you figure it out?" Johnny said, "Why, that's easy. I have a brother at home. He's twenty-one years old, and a half-wit. You're just twice as crazy as he is."

Our superindentent of schools has very progressive educational ideas. He believes that the physical welfare of children is just as important as the mental welfare. That education in its broadest sense includes social, physical, and mental training. He recognizes the fact that a dollar spent today for education, care and treatment of physically defective children will return ten dollars, so to speak, in future happiness, usefulness, and self-support. He also recognizes the fact that the Board of Education is the only official body that can assume the leadership in responsibility for the physical welfare of indigent school children.

This is high school graduation week in Pittsburgh. Educationally, it is the busiest week of the year. As chief of the medical service of the public schools, I was given the assignment of greeting you, because Dr. Graham knows you are interested in the physically incapacitated or handicapped individual, and because he has too many engagements to fill in one evening.

In conclusion—I am sure I express the sentiments of Dr. Graham and other administration officials and teachers when I, figuratively speaking, present you with the key to all our public school buildings and educational facilities. I thank you.

ADDRESS OF WELCOME

EUGENE LeMOYNE CONNELLY
Western Pennsylvania School for the Blind

Mr. Joice, Ladies, Gentlemen, Officers and Teachers of the American Association of Instructors of the Blind:

I do not need to tell you this is a warm night, for I have observed some of you are energetically using your fans.

Moreover, you are to hear some very able speakers, a category in which I, in my most vivid flights of forensic fantasy, have never entered. My address, therefore, shall be short. I hope, however, its brevity will in no way lessen the impression you may get of its warmth, for I can truthfully say that by comparison with its intended cordiality, the temperature outside tonight is a chilling icy breeze.

In behalf of the Board of Directors of the Western Pennsylvania School for the Blind, for myself, and for Mr. Joice and his splendid teaching staff, I am proud to extend this greeting, this sincere and cordial welcome. The hospitality of our school is proverbial but I am sure it has never found expression so happily as tonight. The latchstring is out for you all always but on the occasion of this your thirty-fifth biennial convention, there has been added to its open sesame the outstretched hand of brotherly and sisterly fellowship.

You are engaged in a great and glorious work, a work which cannot fail to conduce to the betterment of the sadly troubled world in which we live and to the happiness, enlightenment and spiritual advancement of the young wards who have been committed to your capable and tender care.

May I say to you, while you are in Pittsburgh—this is your home. You belong to our family and we love our family.

Thank you and thrice welcome.

RESPONSE TO ADDRESS OF WELCOME

EBER L. PALMER

Superintendent New York State School for the Blind, Batavia, New York

Mr. Connelly, Faculty of the Western Pennsylvania School for the Blind, Members of the A.A.I.B., and friends:

When it was announced that the thirty-fifth biennial convention of the American Association of Instructors of the Blind was to meet in Pittsburgh, as guests of the Western Pennsylvania School for the Blind, our anticipation of a happy and profitable meeting was sharpened by our knowledge of the reputation of the convention city and our genial host for getting things done.

Pittsburgh is noted for its ability to do things in a big way. When new buildings are needed for educational purposes, lo! there arises a cathedral of learning. When the nation clamors for more and more steel and iron, Pittsburgh answers by building some of the largest manufacturing plants in the world. Even nature cannot withhold from Pittsburgh its reputation for size of accomplishment, for the watersheds around the city unite to give Pittsburgh national publicity in flood times, and the flooding of the business district becomes national news and a national concern. When Pittsburgh decides to emphasize football, it puts forth teams of national standing, rated as among the best in the country. On the other hand when Pittsburgh decides to de-emphasize football in relation to its other collegiate activities, no half way measures are taken. To those of us who are engaged in work for the blind, however, one of the best indications of the breadth of vision of those who are responsible for controlling the destinies of the peoples of this part of the nation is their choice and retention of a big man to head the Western Pennsylvania School for the Blind—our host, Mr. Joice. With Mr. Joice at the helm the school has been in capable hands and the influence of the school has expanded through the years.

Pittsburgh is sometimes referred to in other parts of the country, by those who do not know the city, as the "smoky city." Yet even if the pall of smoke did hover over the city, it would be the result of fiercely burning fires, fires of accomplishment, service, ambition, belief in the future and in the place of Pittsburgh in the harmony of American life. The fires of Pittsburgh are those of construction in contrast to those all consuming fires which are at the present time ravaging Europe, and challenging civilization.

Therefore, Mr. Connelly, on behalf of the American Association of Instructors of the Blind, I accept your most cordial welcome to Pittsburgh and the Western Pennsylvania School for the Blind. My hope is that we, as individuals and as a group may learn from your city the secret by which you have gone forward, in the face of disaster and seeming defeat. May we take courage in facing our own complex problems and have instilled into us that unconquerable spirit which overrides obstacles, and, upon the ashes of past mistakes and past failures, build a spiritual, moral, and material edifice which will raise the level of accomplishment of our group in work for the blind.

PRESIDENT'S ADDRESS

"Some Fundamentals in the Education of the Blind"

SUPERINTENDENT J. S. GANEY

Alabama

When the geographer would study the course of a stream he might, both with pleasure and profit, give consideration to the fountains whence it springs. The builder who would raise tier upon tier and story upon story in the perfection of a great super-structure must give much consideration to the foundations, the pillars and the sills, upon which he would build. It seems not amiss that teachers who would erect an educational structure might wisely give consideration to the foundations upon which they build. It is neither the expectation nor the purpose of this paper to endeavor to name all of the fundamentals underlying a correct procedure in the education of the blind. If only a few of the more important things which lie at the basis of all such instruction can be named and briefly analyzed it is felt that some service, at least, may be done. What, then, are some of the fundamentals of the education of the blind?

BLINDNESS A HANDICAP: Perhaps the most conspicuous fundamental on which all instruction for the blind is based is that blindness is a handicap. The blind person has limitations which disable him in the race of life to meet and compete successfully with normal people in much of human endeavor. The blind cannot succeed in work where vision is required. This statement seems axiomatic, yet it seems to me that instructors of the blind sometimes become over ambitious and try to incorporate subjects into the course of study which belong only in the school for the sighted. This speaker would be among the last to circumscribe too narrowly the boundaries for blind endeavor. He is often surprised, if not amazed, at many of the accomplishments of the sightless but, after all, blindness is a severe handicap and regardless of the many wonderful things that have already been accomplished by the blind, or that may in the future be done by them, it seems only fair to say that all true instruction for the blind must take into consideration the fact that blindness is a great handicap.

There are many occupations and vocations such as painting, baking, barbering, laundering, beauty culture, and the like which are either doubtful, or entirely beyond them. Therefore, at a time like this, when millions of normal people with all of their faculties find gainful employment impossible of attainment, the instructor of the blind, as well as the blind themselves, is made to feel the importance and the urgency of a training that will fit these handicapped people to take their places in the ranks of the employed. It is my feeling that the steps which have been taken in recent years looking towards a closer union of efforts between the A.A.I.B. and the A.A.W.B. are of a most constructive nature. I, for one, most heartily welcome and endorse this coordination of effort between our two great international organizations. It seems that side by side these two great organizations may confidently work with the full expectation of rendering much valuable service to the cause of the education of the blind.

SPECIALIZED EDUCATION: As a corollary to the first fundamental, namely, that blindness is a handicap, the proper training of the blind would fall in the category of a specialized education. This specialized education would include both form and content. It is needless to say that much of the education of the blind is the same as that of normal people of the same age and grade. It is, nevertheless, true that both the technique and the subject matter incorporated in a proper course of study for the blind would vary in many essential particulars from that used in the school for normals. This indicates two

important things: first, that the teacher who would aspire to teach the blind should first have that preparation necessary to perform this specialized type of instruction. Our organization, I think, is taking a forward step in the matter of teacher certification, and those schools for the blind and colleges which have provided opportunities for special training for those who would teach the blind are to be commended. I believe, however, that all are agreed that not enough thought has been given by our organization as a whole to the proper training of those who would teach the blind. I further believe that much remains to be done in formulating a proper course of study for those teachers who are preparing to instruct the blind. As I see it, we are only in the formative stages of such a course of study and I do not know of a more valuable field of endeavor for the young worker in a school for the blind than that which will give us a more efficient course of study. Incidentally, I believe that some young person now interested in the blind could serve the cause well and wisely by bringing into book form something of the history and biography of many of the successful blind who have hurdled their handicaps and made a name for themselves in the past. There are many such and a book containing their names and accomplishments would be a rich treasure house and inspiration to the blind children of the world. But this specialized type of education applies not only to the person who would teach the blind but there are matters equally pertinent to the blind pupils.

Our present courses of study in schools for the blind are the expressions of superintendents, principals, and teachers in their efforts to meet the needs of the blind. It is a far cry from the days of Braille and Moon, when perhaps the fondest hope was to enable the blind to read, to the present course of study where almost everything is attempted in the instruction of the blind. Much has been done, we have come a long way. Much, however, remains to be done. It is my feeling that a school for the blind has only begun its work in a certain sense when the day of graduation arrives. A factory would soon go bankrupt if the community refused to purchase its products. Until we can train our pupils with abilities that will enable them to find their places in the work of the community I feel that there is cause for concern. I take it that there is no one thought which engages the time and earnest consideration of the executives in schools for the blind more than this question: What changes or additions can I make to my course of study that will prove to be of greatest service to my pupils? Personally I am very partial to a classical type of education. I enjoy literature, music, history, and art, but I am also keenly alive to the fact that blind people need to earn a living and they have every right to look to our schools to prepare them for that service. This calls for specialized education. Those among us who have foresight, imagination, and inventive genius can find work for their talents here.

I venture one further suggestion in the matter of specialized education for the blind. I believe that there are many choice spirits among the graduates of our schools for the blind who are not only capable of taking a college education but who are entitled to that opportunity, and I believe that they should have that opportunity at least upon an equal basis with normal people. A the present time, so far as I know, there is not in the world today a college for the blind, and the blind young man or young woman who would go to college today is penalized for his blindness. Instead of favoring him because of his affliction the odds are doubly against him. He must employ a reader and must engage the service either of a dog or a person to lead him from place to place, and he must go to an institution whose courses of study have been made for normal people. I believe that the blind are entitled to a collegiate course where courses of study are prepared suited to their needs and where books on all subjects may be had in prints that they can read for themselves. Either this should take the form of a separate college for the blind somewhat in the same way as Gallaudet College serves the deaf or else some enterprising and daring college should put in a department exclusive-

ly for the blind. I am not prepared to say which, but I do feel that our present facilities for the higher education of the blind leave much to be desired.

PREVALENCE OF BLINDNESS: The next fundamental in the education of the blind to which I direct your attention is that blindness is prevalent throughout all the nations of the world, and it finds its victims alike among the high and low, the rich and poor. If the scourge of blindness could be confined to a given group then perhaps the problems connected with the instruction of the blind would not be so numerous but, since this is not the case, instructors who teach the blind must be prepared to the limit of their ability to supply the wants of every level and condition of society. It is one of the heartening facts of the present time that numerically speaking blindness from disease is on the decline. However, it will doubtless be many years before blindness from this cause will be sufficiently reduced as to nullify the necessity for institutions for the instruction of the blind. On the other hand, it is a rather discouraging fact that blindness from the cruelties of war and from the many hazardous employments and accidents of our time is on the increase and, therefore, in planning to meet the needs of the blind of future generations it seems we can now venture the assertion that blindness will continue to be a factor for serious consideration with generations yet unborn.

INDIVIDUALITY: The next fundamental in the instruction of the blind, which seems to be vital to me, is that blind people are individuals and should be regarded as such. Very little of our planning, course-of-study building, and even specialized training should, in my opinion, be thought of in the sense of group education. One of the severest handicaps which the blind themselves have to overcome as they meet the normal public is the fact that the public regards the blind as belonging to a particular class or group. We who work with them for years can easily fall into the same error of thought, but we must constantly be on our guard here and teach these pupils, keeping in mind not their handicap or classification so much as their talents, abilities, and aptitudes. Our public today is too prone to look upon a gifted blind person as a prodigy, and upon the mediocre blind person as a moron. Both views are extreme and erroneous, and it is part of our work as instructors of the blind to teach, not only the blind, but the public at large, that our pupils are merely people without sight.

THE FORMATIVE PERIOD: The last fundamental in the instruction of the blind which I will mention is that we are still in the formative period in most matters pertaining to the instruction of the blind. Perhaps most critics who would give serious thought to the work of our schools for the blind would find our courses of study vulnerable indeed. You, doubtless, would join me unanimously in the feeling that we are not convinced that our course of study speaks the last word in service to the blind. We are in the formative period. In the language of the street "we are going places," but we have not yet arrived. I feel that the most progressive step by far which our two great organizations, the A.A.I.B. and the A.A.W.B., have made has been that step of study and investigation known as the Joint Findings Committee. Where there is no vision people will perish. I believe that we have set in motion here some activities that will give us constructive results. I hope that we will continue to rally to the support of these efforts and encourage our best minds and most devoted and consecrated spirits to the solution of the many problems that confront us in this important work. As I see it, there are three great fields of endeavor which cover the entire field of work for the blind. They are prevention, instruction and employment. Our learned doctors are making great progress in the field of prevention. They are not asleep at the switch. Even in the last quarter of a century many of the causes of blindness have been eliminated or greatly reduced. This is a most encouraging fact. Such causes as ophthalmia neonatorum, trachoma, and others have been almost exterminated, or have been greatly reduced.

The use of goggles and other preventives in factories and shops have also contributed materially to the reduction of blindness by accidents. In a word, prevention of blindness is a subject that is receiving more and more attention from the public at large, and the results from such attention are highly encouraging.

The second field of this endeavor in work of the blind, that of instruction, is sponsored largely by those teachers and thinkers that are giving of their days and years to the proper instruction of the sightless. The American Association of Instructors of the Blind is undoubtedly the organization which includes in its membership many of the foremost thinkers of the day in the field of instruction. It has been my great privilege to attend many of the sessions of this organization throughout a quarter of a century, and it is my considered opinion that the organization is today doing better work in a broader and bigger way than ever before. I feel that as long as we keep thinking together and keep the spirit of harmony among ourselves the blind children of our country will be in safe hands.

The third field of endeavor, as related to the work of the blind, is that of employment. Here we have a great organization which symbolizes the work of the blind guided and directed by many of the finest spirits of our nation. The American Association of Workers for the Blind is among the great forward-looking progressive organizations of its day. The adult blind of the nation have much for which to be grateful as a result of the wise thinking and planning of the A.A.W.B. Much of the pleasure and inspiration which the speaker has received during the time he has been honored with the presidency of the A.A.I.B. has come from conferences and cooperation with the executives and others in the A.A.W.B. The last meeting of the A.A.I.B. in Lansing made it the duty of the new president to do certain work in collaboration with the President of the A.A.W.B. Your President has found that work to be a labor of love.

In conclusion, I repeat we are only in the formative stage. As we look back and realize that serious consideration of the training of the blind is little more than a century old, we feel a just pride in thinking of the progress that has been made; but when we take stock of ourselves and come to realize how little we really know about many of the problems that daily confront us, we are made humble and then it is we know that there is much yet to be done. Job said, "I was eyes to the blind, feet was I to the lame." You will join me in the earnest prayer that our lives may indeed be eyes to the blind.

SECOND SESSION

TUESDAY MORNING, JUNE 25, 1940—9:00 TO 12:00 O'CLOCK

"REFLECTIONS FROM AN IVORY TOWER"

Summary of a Talk By
DR. GABRIEL FARRELL
Director Perkins Institute, Watertown, Mass.

When Mr. Scarberry asked me to speak on the subject indicated on the program, I was not quite sure whether he was giving evidence of a poor memory's trying to recall the subject of a talk which I gave in New York a year ago and about which he had expressed a favorable impression, or whether he was revealing his membership in the sporting fraternity which refers to the athletic teams of eastern colleges as composing the Ivy League. I am not quite sure whether he meant to write "Ivy Tower" or really was thinking of a "Tower of Ivory," a term used by a French saint over a hundred years ago to designate a sense of detachment or withdrawal from activity to a serene place for observation and reflection. At any rate, in this talk entitled by Mr. Scarberry "Reflections from an Ivy Tower", I am going to use a little of the material which I used in the address entitled "Observations from a Tower of Ivory."

Because these are reflections rather than observations. they should be a little more fundamental but they are intended to express some of the thoughts which have been rolling around in my mind these last few years and some of the problems which confront all of us in our work. I confess to the fact that I speak very much as a newcomer in this field but during the time which I have been in the work, I have seen many of the oldtimers retire and now we have among us a startling number of new men and women. Perhaps, therefore, all of us can do well to reflect on our common problems and to share our thoughts so that our field may be united and strengthened by common effort and determination.

In my talk in New York I made one statement which has been challenged by some of my western friends. At that time I said, "We are in a losing game and a lot of our planning should be in the direction of gradual liquidation." I cited figures showing the decline in population which is reflecting itself in the number of pupils who may be expected to attend our special schools. At our school we have had a decrease in our pupilage averaging ten and if it were not for the deaf-blind children who are specials it would be considerable more. This drop in our attendance is consistent with the decrease in attendance in schools of all kinds throughout the country. Stuart Chase, in an article in the February, 1939 Atlantic Monthly, stated: "There are more than a million empty desks in our elementary schools this year" and predicts that "if the present trend continues, by 1960 there will be ten million empty desks in schools and colleges. "A curious population wave is passing through our schools owing to the change of birth rate which followed the last war. Right after the war there was a high birth rate. By 1925 it had decreased considerably. Of course the present war may change all that and we may have a new high wave in our birth rate which will fill the empty desks which Mr. Chase predicted for 1960.

Despite this prospect, I think that we will do well to think twice before embarking on any expansive programs. Coupled with the decrease in the number of children, there should be manifest definite evidence of the more effective eye service which is now available throughout the country. These factors ought to mean a decrease in blindness and hence a diminution in the need of schooling for blind chil-

dren. It is also possible that this decrease may become apparent earlier in the east than in other parts of the country due to the fact that our schools were organized earlier and, perhaps we may fairly say that, our services to the blind have been under way a longer time. I know that in many of the western states far-reaching programs for the blind have been established only recently and in their first efforts they have found many blind people who bring about an apparent increase within their communities. As soon as this initial work is over, their load will level out and later will begin to show a decrease. This decrease in blindness, however, is not anything about which we should be deeply concerned. In fact it should be our ideal and our goal. If we are not in a losing game, then our work is not effective. Our aim is to eliminate blindness and we should rejoice at every evidence of its diminution.

On the other hand, there are pressures being brought upon us to admit to our schools more and more children. These pressures come from demands to include within our program children possessing sight beyond the usual ten per cent maximum and to keep within our schools or to accept as pupils boys and girls who have not sufficient mental ability to meet the high standards which have been established. These are social pressures which seem to be on the increase but I feel that we must guard against them. It is hardly fair to pupils of good promise to have within their group children of such low mental ability that they drag down the standard of work and the general standing of the schools. At the same time our schools as organized are not the best medium for the training of these boys and girls. This should be found in an entirely different place and type of school.

In the same way boys and girls who have impaired vision but who are not blind should not be required to go to a school for sightless children. Here is an area where there is need for expansion. I know of nothing that would be more helpful than to try to divert much of the interest that people now have in the blind to rendering assistance or making provision available for the children with partial vision. This of course should be done through the sight-saving classes organized in the public schools. There are not enough of these classes. Every effort should be made to increase them. I am aware of the arguments of the difficulty of taking care of the isolated child and that the small public schools cannot provide the special classes needed. To provide for these children, I would have small residential cottages for the handicapped groups connected with all state teachers' colleges. Handicapped children could come to them from the isolated regions and form practice classes for the teachers in the training colleges. This would not only serve these children but would enable all of our school teachers to have some first-hand knowledge of the problems of handicapped children.

The fact that we have accepted the public school class as the solution for the education of partially seeing children makes many ask why blind children cannot be educated also in public school classes. They are, as we all know, in many of the larger cities. There seems, however, to be a controversy between the effectiveness of the public school class and the residential school. While I do not wish to enter into that argument, I feel that we who are in the residential field ought to be aware of this apparent trend toward the public school for specialized education. Those interested in the public school classes claim that sending children to large residential schools is a relic of the era when all defective children were institutionalized. They feel that every modern school should care for all the children within the community and they advocated the benefits of continued association with the family and the community in which the child will have to earn his living. In this latter respect, there is certainly a strong argument. One of the defects of the residential schools is that when a child has completed his education he is returned to a community where he has lost his contacts. Those who are in charge of placement know the difficul ties that are involved in this severance of relations.

Against these arguments, we place the many benefits which the residential school can afford: the superior training, music, athletics and the fact that the child lives through his formative years in an environment of his peers. Although I do not wish to argue the point I believe that we cannot be unaware of this situation. Certainly we must avoid the tendency to maintain our positions at the expense of the children whose welfare should always be uppermost in our minds.

As we look over our whole field, the really astounding thing is how small a segment it is of the whole population. If we state, as we do, that one person in a thousand in this country is blind and then follow through with the fact that two-thirds of the blind are over fifty-five years of age, we haven't many left who are of school age. For the sake of having a picture of the whole field, let me summarize the findings of the National Health Survey made in 1935-36 in regard to the number of blind in this country. These figures give 117,000 as the total number of blind persons in the United States. Although I think the estimate is too low, we will use this figure as the basis of the distribution in age groups. In this summary I am going to cite suggestions for the care of the various groups which will be amplified in the talk but cannot be stated in full here.

117,000 blind persons in the United States.

76,000 over fifty-five. Granted pensions and placed under old-age assistance.

33,000 between twenty-five and fifty-five would be divided:

16,500 unemployable. Turned over to local assistance and their causes of incapacity cared for by welfare, medical and psychiatric units.

16,500 employable. Absorbed in professions, industry, or shops under the guidance of state agencies for the blind.

8,000 under twenty-five. Under the direction of educational authorities.

3,000 needing custodial care or rehabilitation. Referred to those authorities.

5,000 potentially good material. For training in special schools.

These distributions and reductions bring us down to about 5,000 children which are the number in our schools. Certainly all of us, with the tremendous resources that we have, ought to be able to do a good job for that number of children. Perhaps the outstanding need in this distribution is frank recognition of the large proportion who are unemployable and untrainable. These facts must be faced in a realistic way and it is only through the selective process of locating promising blind children and giving them the utmost in training that we can re-establish the old principle that a blind person can, through education, take a contributory place in the social and economic life of his day.

THIRD SESSION

TUESDAY AFTERNOON, JUNE 25, 1940—1:30 TO 2:30 O'CLOCK

"COMMON CULTURAL RELATIONSHIPS WITH SOUTH AMERICA"

DR. M. E. FRAMPTON

Principal, New York Institute for the Education of the Blind

Recently we have been deluged with numerous newspaper and magazine articles concerning South America—The Influence of the Dictator States in Latin-America Trade Relationships, The Americas for the Americans, the Stevens-Winslow affair, good neighbor policy, navy ships for South American republics, the Argentine meat question, and a multitude of other subjects.

Our new Secretary of Commerce, Harry Hopkins, has launched what he has termed a new policy for Latin-America — "Real Neighborliness." In all these discussions and articles one is conscious of a serious lack of understanding of the cultures of the Central and South American Republics. In fact, a careful analysis of the articles reveals the urgent need of a student of psychology and a historian of Latin America on the staff of our commercial concerns in our state department. The development of a policy of "real neighborliness" is fundamentally a socio-psychological problem and not an economic one, at least at the outset. If our business men are to hope to continue to rank among the foremost nations in trade with South America, they must see that close cultural relationship exists between these Latin American countries and the United States.

We are now pressing for an open door policy in South America. The only open door policy at present which will work is a policy of American cultural exchange in music, art, education, social welfare and medicine. The hand which is extended in friendship today must be the hand of one who understands, respects, admires and wishes to perpetuate the noble contributions of the cultures of others. Such a neighbor must be a friend who is willing to give to others the benefits of our own cultural achievements without expecting full reciprocation. At the present time our business and social leaders are not willing to accept this policy. If one knows the Latin American, especially the South American, one can be sure of complete response and appreciation to such an approach of neighborliness. Such an open door policy is again more apparent and desired than is often realized by our commercial groups in the United States who are looking for business. It is by no means wholly a one-sided charity affair.

I do not share the general opinion of some recent news articles that the leading South American countries are under the influences of the dictatorship ideology and prefer these ideologies to those of the United States. I found the leadership of these countries intensely nationalistic in a wholesome way. Most Latin American republics are fervently democratic and determined to maintain their own liberties, both economic and geographic. I have little fear of any of the "isms" captivating such countries where a high material standard of living exists, where land is plentiful, and where the nationalistic spirit is socially and culturally so well developed as it is in the many South American Republics.

For example, I found the educational, social and medical leadership of the Argentine, in spite of recent statements to the contrary, much interested in American ideas, American friendship and American co-operation. To an educator, this is a challenge for our American leadership to accept the responsibility of giving to these people the kind of guidance, advice and

leadership which will help them to maintain their democracies and develop within their geographic boundary the kind of democratic idealism which has characterized our own democracy. In the last analysis, such a common ideology is the only force which will bring North and South America together in common like-mindedness.

In the history of successful trade relations between peoples there has always been a period of cultural association which has developed a common like-mindedness. This common like-mindedness has become the basis for mutual understanding, mutual satisfaction of human needs and mutual assistance. Our first task is to develop this common like-mindedness between our country and Latin American countries. This we can do if we help them develop social leadership, and the Argentine is showing the way in work for the blind.

The Argentine leadership has taken its social responsibility with deep earnestness, and under the active leadership of President Senora Maria de Pereda, the program of the Patronato Nacional de Ciegos has been drawn to the attention of President Ortiz of Argentina, who has done much to encourage those working in this field.

These Argentine people view their service for the blind with high idealism. Their idealism is as lofty as are the magnificent peaks of the Andes. As one flies over these high ranges, the second largest in the world, the air steward points out a watch tower from which the reports of the weather in the passes are made to the pilots. The plane passes the famous statue of the Christ of the Andes, standing as a mighty symbol of peace and brotherliness between Chile and Argentina. Further on the Emerald Lake of the Incas is below, and to the left the giant Aconcagua is seen, reaching more than 23,000 feet into the heavens. What a high and mighty watch tower from which to observe the small schemes and plans of men, and with a lofty view from just such a watch tower the Argentines have built their program for the blind.

They have planned to spend four million pesos during the next two years on buildings and service programs. The following is the planned program, now in its second year:

1. Construct a big modern school for boys and girls in Buenos Aires, which will be the best of its kind in the world, far superior to that in New York City.

2. The construction of a large clinic for the treatment of eye diseases and for the prevention of blindness.

3. The construction of ample quarters for a school for Arts and Crafts for men and women which will enable them to earn a living by providing them with permanent jobs and the sales of the manufactured articles.

4. Development of propaganda programs for the blind in order to show that the blind can perform their duties with as much accuracy as a sighted man, and provide jobs for all of them. This is not an easy task. In the City of New York there are examples of many blind people who hold positions in offices and who work in other professions, however, they have always had to overcome great obstacles to convince the public that the blind can do things with as much easiness and accuracy as a sighted person.

5. The establishment of a National Braille Printery in order to publish newspapers and magazines in the same system as the books are printed.

6. Consider the problem of aiding the blind through the means of scholarships.

7. The building of a home for the blind who have no family to care for them and for the mentally retarded blind.

8. The creation of a course for the specialization of training sighted and blind teachers with efficient methods for teaching the blind.

From this watchtower the Argentine leaders have seen into the future and built well, thus giving us food for thought.

1. They are enthusiastic about their

work. They accept the challenge of a hard and difficult job and set their shoulders to the wheel. They are not defeatists.

2. The Argentine social leaders see the value of a well developed small field of social endeavor, such as work for the blind, as a leaven for all social efforts. Smallness seems to them of no importance compared with the influence the field has on the general social picture.

3. Their interest in the child and the individual is paramount.

4. For these dwellers on the mountain top, human beings are complex human organisms, and they find difficulty in accurately predicting future conditions and situations such as we are attempting. They think it more correct to outline several future avenues and possibilities, rather than prophesy a definite future trend. Statistics and life are two different things, at least in degree. Here we find the real realists who have learned to read and understand the history of human mores.

5. We discover these observers willing and eager to establish services for the blind, partially-sighted and other groups without worrying too much about terminology. Normalcy to them is when and where a handicapped individual finds economic self-sufficiency, is socially acceptable and personally happy. We in America have a great lesson to learn in this connection.

6. The Argentines are not vitally interested in placing human beings in quantitative test tubes. They feel that most of our quantitative measures are valuable only as exploratory tools but not measuring rods for successful living. We are beginning to see here what they already know.

7. Our social leaders of the blind in Argentina do not become involved in the fallacy so common to our educators, the fallacy of abstraction in which particular facts and individual differences are overlooking in the interests of general theory. When group statistics are applied to individual cases you almost always invalidate your general conclusions.

These observers from their watch tower are throwing us a beam of light to guide us in our blind program. They have a unified program for the blind throughout the nation, from prevention to rehabilitation and care for the aged. They have developed a building program which, when completed, will be second to none. They have educated the public, developed a new social consciousness by means of work for the blind and shown the way to other groups interested in social amelioration.

We salute our neighbors to the south and wish them good luck and Godspeed in their glorious undertaking.

"WORK FOR THE BLIND IN INDIA"

AMAL SHAH, D. S. M.

Leader of the Blind Scouts, Calcutta, India

Mr. President, Ladies and Gentlemen:

It is indeed both an honor and pleasure to speak to you this afternoon about our work among the blind in India. It is rather difficult to cover all sides of our work in a short speech, but I will try my best to put everything in a nutshell.

The viewpoint regarding the blind which has existed in India for many years, and which still exists in most quarters, is that blind persons are brought into this world for two reasons: First, since an offense must not be permitted to go unpunished, and since blindness is adjudged the penalty for a certain crime, this penalty must not be unduly interfered with; secondly, the presence of the blind and their handicaps is believed to be a warning against the repetition of crimes which might bring

with them such a penalty as blindness.

The traditions of this ancient land show that in the past a blind man was given his due, and was tolerated without any kind of disparagement being offered him, but was not allowed to inherit and manage property. Gradually, as modern civilization more and more got the upper hand and the desire to live in accordance with old traditions became less and less keen, the blind came to be considered a burden to their families and to the community. Naturally, the next question raised was: Why should a blind man remain idle and have an easy life? Why could he not be given some training and become a self-helping citizen.

The history of the modern education of the blind in India goes back only fifty years. While travelling in India my grandfather, the late Reverend Lal Behari Shah, met an English missionary, who told him the romantic story of Louis Braille and his invention by which the blind could read and write. The idea of a reading and writing system of raised dots fascinated my grandfather, and he set about learning the system. The more he learned the more interested he became, not only in Braille, but in the general cause of the blind. He adapted the system for the Indian languages—as you well know, in India we have many languages. The French language has only twenty-five letters to the alphabet, whereas the Indian vernaculars have more than sixty letters besides half-vowels and letters in combination. Like the original, the adaptation is, therefore, not simple, and it should be considered an achievement in itself. Like the original, the adaptation is arbitrary, but a scientific basis has been evolved in both cases. The adaptation of Bengali, Hindhi, Urdu and Sanskrit have stood the test of more than forty years, and the blind readers of our country can read and write by touch as any of us may do by sight. Grandfather Shah found two pupils to teach. Gradually others heard about his work and how he taught the blind to read with their fingers, and, before he realized what was happening, he had forty pupils on his hands. He had to appeal for public aid to build a school so that the education of the blind in India might be put upon a larger and more scientific scale, and in this he succeeded in 1897.

Lal Behari passed through many difficult circumstances, which time will not permit me to mention, but the story of how he fought for the blind appears in his biography. Today all the leading men, from His Excellency the Most Honorable Marquess of Linlithgow, Viceroy of India to Mr. Mohundad Karamchans Gandhi, the Leader of the National Congress Party, take real interest in this work. Our great leader Gandhiji, may be said to be helping to a large extent to prevent blindness in our motherland because, as you know, he devotes a good deal of his time to the reconstruction of villages and to the education of our poor villagers, who are among the poorest people on earth and without any education. If his plans work out successfully, then the amount of blindness which is at present very great will gradually be reduced.

The School which Lal Behari Shah founded is today the leading institution for the education of the blind in India. In 1925 this school was in the heart of the city of Calcutta in his own home. It was moved that year to the southern suburb of the city, into its own commodious premises and spacious grounds. The School which was started in a very small way with only two pupils fifty years ago, is now a well-organized institution, whose directors are all notable men of Calcutta, headed by His Excellency Lord Hurburt and The Lady Mary Hurburt, as Patrons and Sir Harold Derbyshire, the Chief Justice of Bengal, as the President. The Board of Governors consists of people, representing the Government and the public.

The work of the School is divided mainly into eight main sections, namely, Literary, Nursery School, Industrial, Musical, Physical, Teacher-Training, Gardening and Domestic Art. All pupils receive a literary

education up to the Primary Standard. Those who exhibit special aptitude are admitted into higher classes and prepared for the matriculation examination of the Calcutta University. The graded syllabus for basketry and cane-weaving has proved helpful. The aim is not to be contended with anything not thoroughly done, for in the world's market no job will be paid for unless it is well done. It is gratifying to note that the graded syllabus which has been introduced in our School, has also been adopted by all the industrial schools in Bengal. Every year in different competitions our boys and girls send in their articles, and it is pleasing to note that they always win the trophies and medals for best work. This itself proves that the work in this department has been carried on successfully.

Training in Music is independent of sight, and can therefore be easily acquired by the blind, and it affords them a respectable source of living; nearly one-third of our ex-pupils are in fact earning their living as music teachers or musicians. Besides vocal and instrumental music, dancing, caricature, and play-acting form part of the course for play-actors or social entertainers. The radio also affords occupation to blind artists. The students of the school broadcast their own musical programs from the Calcutta Broadcasting Station from time to time, which are appreciated by the listeners. A few of our old students are also engaged in movies. The Boy Scout Group of the School has a band of its own, and it is interesting to note that the blind scouts always lead the sighted scouts of the District in marching with their band. They led the whole Behala Association of Boy Scouts in the open streets last year at the Annual Rally.

Blind children are said to have ordinarily twenty-five per cent less vitality than the seeing, and they are usually in an anaemic condition when they come to the school. Emphasis is, therefore placed on physical education in various forms, including the usual drill and gymnastics, corrective exercises, long walks, swimming, rowing, diving, outings and camping trips. Scouting provides a healthy occupation and pastime of the type so difficult to find for the blind. The Calcutta School has forty Scouts and about twenty-five Cubs. They have acquitted themselves creditably in competitions with the Scouts who see. The Group actually stood third among many sighted troops of the Behala Local Association and was awarded the trophy. In the Annual inter-troop aquatic sports the blind Scouts also stood second among many competitors. The blind Scouts and Cubs are anxious to proceed as far as possible on the same level with the Scouts who see, in spite of their handicaps. Their courage, coupled with zeal and earnestness in the field of Scouting, has been the source of encouragement of many a sighted brother. I introduced Scouting among the blind in my homeland and today I am very proud to report that I have more than seventeen troops all over India. Some of the blind Scouts have already passed many difficult tests of the First Class and King Scout Badges. We hold every year two Scout Camps, where the boys learn more self-resourcefulness in outdoor life than they do anywhere else. Scouting for the blind is recognized today in India as part of the great world-wide activity. Our girls are also carrying on the work of Girl Guides satisfactorily. (We call them in the British Empire, Girl Guides not Girl Scouts).

You will be pleased to hear that His Excellency the Viceroy of India has presented the Certificate of Merit for this work. I consider this as an achievement for Scouts who live in a world of darkness.

Great care is taken to train the hand and develop touch, which is the essential sense and almost the only asset of the blind, and without which their training is an impossibility. Object lessons, nature study, modelling and gardening are included, and the pupils are also given lessons in learning locality and direction, since the intuitive faculty which guides some children is entirely wanting in others. Obviously, the more young blind people are brought in contact with nature, the better; as it is, they get little enough compared with other children. In the fairly

large grounds of the school, they experience the changing seasons and all that they bring—wind, rain, sunshine, flowers, and fruits. The children have their own plots of ground where they interest themselves in gardening.

Our students love their own zoo which they have in their school. This gives the blind children opportunity to come in contact with the living animals and to know more about them. Many of them have learned mimicries and it is striking to note how easily they imitate the calls. Every Friday a group of boys and girls by turn go to the Zoological garden which is in the city of Calcutta, where with a special instructor they visit different buildings and learn the lives of different animals and birds. They are allowed to see by touch those animals which are not ferocious.

We have our own Museum too. The Calcutta Government sends us many stuffed animals and birds every year. Some of our friends whose hobby is big game hunting have also very kindly presented skins of tigers, deer, etc. and our little Museum is becoming big gradually. The students feel proud of their own school with these things, and when the visitors come, our blind receptionists take them around the buildings and campus of the school.

The students visit the Calcutta Government Museum frequently. The Girls learn nursing and the boys the first-aid through the Scout training which have proved beneficial. The senior girls by turn help in the kitchen and learn the secret of cookery. The students publish their own daily and monthly papers in Braille. They have Music, Dramatic clubs and Debating Societies which are organized by themselves.

The Institution has a special department for employing the ex-students who do not find jobs after graduation. This department helps them to continue their work until they are placed in suitable positions according to their abilities. It is striking to note that all our former students are employed in various work and most of them are carrying on their work successfully. These young men and women help the school in different departments. You will be interested to know that in this way, the school runs a workshop which takes orders from the Railway Companies and from other places to make their chairs, waste paper baskets, rugs, carpets, etc. The workshop gives scholarships to students who can not afford to buy clothes and other equipment such as Braille writers or musical instruments. India has no place from where we can secure the Braille writers, so we purchase the English and American writers and other essential equipment which are costly according to our money.

The institution is well cared for, but above all, no one can fail to be moved by the obvious cheerfulness of students of all ages, which says so much as to the care they receive and the manner in which light and interest have been brought into their lives by the system and methods which the school has adopted.

Let me give you a few examples from our old students. Professor Nogendra Nath Sen Gupta, M. A. in two subjects a lecturer of the Bangabashi College in Calcutta, is an author of books on logic, a University examiner, and an editor of a daily newspaper, thus proving to the world that given opportunities, sightless persons can hold positions of responsibility after proper education and training. Mr. Subodh Chandra Roy who came to our School from a village of the District of Barishal, at the age of eight, passed successfully from the Calcutta University and got his M. A. degree and studied law and joined the Calcutta High Court as a Junior Barrister, secured a scholarship from the University of Calcutta and the Government of Bengal and came to America to study the education of the blind at the Columbia University and at the New York Institute. It is pleasing to note that he completed his work and was awarded the M. A. degree from Columbia in 1937. He traveled many parts of America and England, visited Japan and recently returned to India with his newly-married American wife, to help in the education of the blind. Mr. Sadhan

Gupta, a son of a prominent member of Congress, a graduate of our Institute is now studying M. A. and Law at the Calcutta University. He stood first in Sanskrit among twenty-five thousand candidates in the Matriculation examination a few years ago. In this connection, I should also like to mention the name of Mr. Kamal Kanta Mazundar, en ex-student of the School, who founded a school for the blind in Patna, in the province of Bihar. Unfortunately he died three years ago, at a very young age, and we thus lost a devoted worker for the blind. There are many other students who graduated from this Institute, earning fair livings. Many of our girls are also helping in many ways in the social fields. The School therefore can be compared favorably with the schools for the blind in the Western countries. The Institute is influential, occupying a unique position among the educational organizations in the country. The work that is being done in the Institute and the wonderful results which it has accomplished only in fifty years in difficult circumstances without proper buildings and modern equipment are interesting and instructive, and the issues involved in them are undoubtedly of vital importance. The education and the training of our children must be regarded as a matter of great national concern.

It is difficult for me to say anything about my own grandfather, but I feel this would be incomplete, and I should be lacking in my duty if I refrain from paying homage to the great founder who devoted his life and money to the cause of the blind of our country. The blind in India owe to him a deep gratitude because the Calcutta Blind School, which is the expression of his benevolent heart has brought light to the blind in our country by opening out before them a region hitherto unexplored when they were thrown into a world of darkness. His supreme gift to the blind in India was the gift of his own sight, for he became blind in 1916 at the age of sixty-three. When my father returned to India in 1918 after his training in England at the Royal Normal College for the blind, he found my grandfather blind. Lal Behari Shah died on the 1st of July, 1928. His Most Gracious Majesty, the late King George the Fifth, recognized the service which he rendered so voluntarily to the blind in India, by awarding him the Kaisar-I-Hind Medal in 1922.

We celebrate the Founder's Day every year on the first of December on his birthday when our old and present students meet together. Our sighted students of the Teacher Training Department who are now employed in different schools for the blind in India also come. All students, teachers, and members of the Board of Governors, go to place wreaths on the grave of the Founder, Public bodies are also represented and each year the citizens of Calcutta hold a memorial meeting at the Town Hall.

The School is not only helping the blind in Bengal but it is helping in a great extent in the welfare of the education of the blind of the whole country. When necessity demanded, we gladly spared our fully trained Vice Principal Mr. R. M. Haldes, who studied in Harvard University and at the Perkins Institution, to help the blind of the Western India by taking the position of the Principal of the Bombay Mission School for the Blind. In this connection I can safely mention that he is the only successful man who is doing real work for the blind in India after his American training. We are at present planning to establish two schools, one in Hydrabad and the other in Boroda. We have trained three graduate students for this new field, who were deputed by the Government of His Royal Highness Nizam of Hydrabad and the Maharaja of Boroda to undergo training in our school.

Above all the Board of Governors of the Calcutta School feel proud of having a Principal of thirty-three years of experience in this special field, who helped the school at the beginning for more than ten years with his voluntary services. The Principal considers himself fortunate of having a staff of devoted workers, most of them are trained for this special work in our school. As you know, it takes time to train a teacher for the blind, so we think

a great deal of the workers of the blind, not only the teachers but also the servants. We are glad to have some teachers and helping staff who are with us for more than twenty years. We consider these teachers and servants as richer counsels and experienced guides, which are very difficult to find, because today we are living in a world, where greed runs rampant and supreme selfishness plays a dominant part. We bow our heads in reverence to the noble hearted workers who do not work for money but for the love of labor.

On our Annual Commencement Day we invite more than three thousand people to visit our School. Apart from this main function we arrange many minor occasions for the public to visit the school, and every one is cordially invited. These events give opportunities for the public to learn the needs of the blind children and to lift up the veil of darkness from them.

The School has accommodation for two hundred boys and girls. We need more staff and up to date buildings fitted with modern equipment to start new departments for mentally retarded, feeble minded, and deaf-blind children. The Government of Bengal has generously given a grant of 50,000 rupees recently toward the building fund of the School. Her Excellency, The Lady Huburt and the Prime Minister of Bengal, The Honorable A. K. Fazlul Hugh recently visited the School. The Prime Minister presided over the Annual Commencement and I am hoping to hear soon that the school has received another lump sum grant from the Government.

Altogether there are at present twenty-two schools in different parts of India for the education of the blind. These schools are giving education to approximately two thousand children. The total number of blind people in India is nearly two millions, and among them there are fifty thousand blind children of school age. From this statement you can easily imagine what a task confronts the educators of the blind in our homeland. It is impossible to do anything unless the Government takes up the problem, and until you, my friends, those who are connected in this noble work give us your valuable help. We in India, feel akin to you and we hope you will realize our difficulties and our problems and try to support us to rise for a humanitarian cause.

If the laudable object of the Indian Government of spreading literacy among the people at any cost is to be truly and effectively accomplished, the education of the blind at public expense should be included, inasmuch as blind persons are as good subjects of the Empire as any other. If early education and training were given by the State, there would still be occasion enough for private philanthropy to do social work.

Along with the education of the blind persons, prevention work should be vigorously carried on. The problem might be divided into three main parts: Prevention of blindness, education and training and after care. In the West today great emphasis is laid on prevention. In India the real work of prevention of blindness was started only a few years ago, and with proper management, is making rapid strides.

"Only the fringe of the problem has been touched; much yet remains to be done." So said Lord Lytton at the Opening Ceremony of the new buildings at Behala in 1925. It is for the young generation to take up the work of the great Founder and continue to build on the foundation laid by him fifty years ago, to help the blind to taste the happiness and joy of life and to make their lives bright and beautiful.

My own mission among the blind is of my own, which has not been supported by any organization, except the kind help of the Principal and the members of the Board of Managers of the New York Institute for the Blind, where I have been expecting to learn more about this work. I am grateful to all my friends who are making my stay in the States pleasant and fruitful, and I hope to return soon with modern American ideas to give a helping hand.

I am not reciting these facts for the sake of ornament, but for the purpose of giving you an inside idea of our work. Every word I utter is from the core of my heart.

"TEACHING THE BLIND IN INDIA"

NATESH MUDALIER
Principal, Deaf and Blind School, Mysore, India

Ladies and Gentlemen:

John Gunther and other distinguished visitors have expressed their due appreciation of the Mysore State as the Model State of India. The state is rich in natural resources and has pioneered in many directions so as to deserve the title "Pattern to India." Among other things for which it is famous, Mysore is acknowledged as the first Indian state to have a university of its own. I am grateful to you for asking me to speak this afternoon and thereby honoring my State, of which I am proud to be a citizen.

India is a vast country covering an area of 1,808,593 square miles and with a population of 352,796,300, of which about 239 million are Hindus, 78 million Mohammedans, 13 million Buddhists, 6 million Christians, and the rest Jews, Jains, Sikhs, and others. The people are divided into several races and castes, and have different social distinctions. But in spite of this, they are all guided by the spirit of kindness to others; so much so, they carry this idea to the extreme, and look upon the blind and other handicapped persons merely as objects of charity. The feeling has been one of pity and compassion. During large festivals and other occasions, the Hindus and Mohammedans distribute alms to beggars including the handicapped. The Hindus are guided by the theory of Karma, which means that the handicap or any kind of suffering is the result of the sins committed in the previous life; but there is always an underlying spirit of sympathy.

The modern education of the blind did not start in India until about the last part of the 19th century. The Christian missionaries, who have been responsible for starting many educational institutions and hospitals and the like, were really the pioneers in the work of the blind also. Even today, most of the schools in India are run under the auspices of the Christian missions. Incidentally, it may be mentioned that there are more than 6,000 missionaries in India and they conduct more than 12,000 recognized schools, operate more than 200 hospitals and many centers of welfare work.

As stated above, the attitude of the public towards the blind has been more of pity and compassion than anything else. The blind have been regarded, and still are, in most cases, as a burden to the family and society in general. Since the percentage of illiteracy in India is very high, and poverty and indebtedness are the watchwords of the majority of the people, the condition of the blind has been much more deplorable than that of any other handicapped group. Added to poverty, indebtedness, and illiteracy there is the question of over-population in India. How could a poor farmer with a family of at least six persons live on an income of about eight cents a day? What do you think his position would be if he had a blind son added to this burden?

The marriage question of blind persons in the Western countries depends upon the individuals concerned. But in India, since it is the parents who usually arrange marriages, they do not like the idea of having a blind person as a life-partner for their son or daughter.

Having said so much about the social and economic conditions of India and the attitude of the society towards the blind, I should like to say something about the educational work, which includes prevention program also. Except for the efforts made by the Indian Red Cross and other similar organizations, not much preventive work has been accomplished. Two of the most important causes of blindness are Ophthalmia Neonatorum and Small Pox, and the majority of the visually handicapped are totally blind. Owing to illiteracy and other causes referred to in the

previous paragraphs, proper preventive measures have not been taken. The Census and Case discovery also present difficulties. It is unfortunate that most of the schools find it very difficult to get even such information as dates of birth, age at which blindness occurred, and so forth.

Some of the outstanding schools in India are those in Madras, Palamcottah, Calcutta, Bombay, Mysore, and other places. Owing to the political divisions into several provinces and native states and in view of the language differences etc., each institution is a unit by itself, and there is no common relationship among these institutions. The Palamcottah school, which was started in the year 1890, is claimed to be one of the largest in Asia. The schools at Madras and Calcutta have teacher-training sections attached to them. The former school, which was started later than the Palamcottah school, has adopted modern methods of teaching, and has been doing very good work under the principalship of Mr. William Bell of England. The Mysore school had to reject applications for training from residents of Cochin, Ceylon, and other places since it was felt that there was no use in professing to train people unless the school had the necessary equipment and staff. Bad training is worse than no training at all.

The Braille system has been adapted into the dialects taught in the respective schools. The standard achieved in literary education is far from satisfactory.

The vocational training has been receiving very great attention of the educators of the blind in India. Since most of the pupils come from rural areas, cottage industry is encouraged. The idea is to teach them such handicrafts as they can use when they return to their homes. Weaving, caneing, mat-making, and thread-making are some of the crafts taught in some schools. It may be mentioned here that the Mysore school has opened a General shop as an adjunct to the school with a view to employing the ex-pupils on a piece-work system, taking, of course, the minimum wage into consideration. Moreover, efforts are made to start a Home for the unemployable blind and to give them the education suitable to them. This seems to be better than pure charity. The Government of Mysore buys all the articles manufactured in the school and the shop for use in offices, institutions, boarding homes, and the like.

Considerable attention is given to the teaching of Music. It is gratifying to note that all the blind pupils of the Mysore school proficient in music have been employed in the palace of His Highness the Maharajah of Mysore.

The rehabilitation question is tackled by each school individually. There is no provincial or national organization whatsoever. I am really doubtful as to the feasibility of having a national organization in view of the fact that there are not very many trained workers, and owing to the difficulties of the language problems and others.

Since a large number of non-handicapped persons duly qualified either in academic or vocational education are unemployed, it is really a difficult problem to find employment for the blind.

Thus, when compared to the work done in America and other western countries, the education of the blind in India leaves much to be desired. The problems are many and varied. Parental education, special training of teachers with good academic qualifications, less adherence to the religious scruples and caste systems, co-operation among those engaged in the work, adoption of modern methods of teaching, and proper educational and vocational guidance in schools, and other improvements will aid in the advancement of the education of the blind in India.

In conclusion, let me express my heartfelt gratitude to Dr. Merle E. Frampton, Principal, New York Institute for the Education of the Blind for so generously enabling me to receive proper training and to study the systems used in America, and also for his keen interest in and kind hospitality to the foreign students. The people of India have a great regard and esteem

for you, Americans. The following observations made by His Highness the Yuvaraja of Mysore on the occasion of the exhibition of American educational films in June 1939 show what we Mysoreans, living ten thousand miles away from you, think of you and your country, and how grateful we are for all your generous acts:

"My trip to America in 1932 has been of deep delight and I was deeply touched by the whole-hearted hospitality of American people, and today I bear many happy memories of unselfish friendships from that country. The practical vision of American people impressed me very much. Every phase of American life is so practical that there seems to be a complete harmony of man's inner being with the external material growth. America is the land of ideas and there the growth of ideas takes practical shape spontaneously. In that country alone, an intelligent idea becomes the body of that idea in matter. There alone, the visionary has fruits of his dream in fullness of feeling, alive with touch, be it within the domain of architecture, industry, religion, or scientific development."

Ladies and gentlemen, let me thank you once again for the privilege you have so kindly given me to address you. My stay in America has been of very valuable help to me. On behalf of my people and myself, I offer most sincere and grateful thanks for all the hospitality you Americans have been extending to me, my State, and my country.

SECTIONAL MEETINGS—COMMERCIAL

Junior and Senior High Schools

TUESDAY AFTERNOON, JUNE 25

SUPERINTENDENT A. L. BROWN, Chairman, Colorado

"AIMS OF COMMERCIAL TRAINING IN SCHOOLS FOR THE BLIND—VOCATIONAL AND PRE-VOCATIONAL"

SUPERINTENDENT A. L. BROWN
Colorado

When the above assignment was given to me, I inquired as to what the scope of the subject should be and was told that it should cover "the teaching of such commercial work as is ordinarily taught in average secondary schools plus enough commercial training on higher levels to enable a blind person to take an office position."

The question that naturally arises is: Should our commercial course be designed to prepare our graduates for an office position, or merely to help them meet the problems of every day life in the business world?

In order to find to what extent other schools for the blind were giving commercial training and to ascertain their degree of success in preparing and placing their graduates in office positions, questionnaires were sent to the forty-one residential schools for the blind throughout the United States. We received replies from thirty-nine of these representative schools.

Of the thirty-nine schools replying, only five felt that it was worth while to give a complete commercial course such as is usually taught in a regular business school or business college. These schools are located in different sections of the country and range in enrollment from about eighty to two hundred forty.

One of these schools reports that ten

of its graduates are doing some type of office work—we do not know exactly what type each is doing. Six of these have no sight. Nine out of the ten are employed in some agency for the blind and one is employed in the industrial field. This school feels that a great deal of emphasis should be placed on commercial training.

One other school has ten totally blind graduates doing office work, two of whom are employed in the industrial field. The others seem to be employed in some agency for the blind, in government service or in some type of social welfare work. While this school does not state that it believes great emphasis should be placed on commercial training, it does believe that "students should know the common everyday business practices in use at the present time."

The other three schools giving this full commercial course have two, one and no graduates respectively doing office work. These three graduates are employed in agencies for the blind.

The experiences of these three schools lead them to the opinion that too much emphasis should not be placed on this phase of teaching.

One expresses its purposes as follows: "We aim to give the most thorough training possible which will always be a personal asset and will in addition be a vocational asset if opportunities arise."

We realize that many of our schools would not be teaching a full commercial course but we desired to learn how many taught a limited commercial course. Four did not reply to this question so we could probably count them on the negative side. Fourteen answered in the negative and twenty-one stated that they did teach a limited course. They did not state how limited but replies to questions that came later in the questionnaire led us to believe that these courses were not very extensive.

We were also interested to find out if these courses were given to all of the high school students who expected to graduate, as were the other high school courses, or to only a selected few.

Ten of the thirty-nine schools seem to treat the subjects in this course as regular high school subjects and teach them to all students in this group. Twenty-three schools teach these subjects to a selected few. There is a limited number of schools that seem to include this commercial work in their course of study but offer it only when they have a very promising student who has bright prospects for employment and desires to prepare himself for it.

Seventeen schools permit students to return after graduation to take commercial subjects or to continue the course which was begun while they were in school. When it comes to the matter of the various subjects taught in this course, some very interesting facts developed.

As one would naturally expect, typewriting was the most popular subject mentioned and is the only one taught by all of the thirty-nine schools.

Next in popularity are commercial arithmetic and business English which are taught by twenty-seven and twenty-six schools respectively.

Twenty-seven teach their students how to keep a simple record of receipts and expenditures while only four give a limited course in Bookkeeping.

In connection with the typewriting course, nineteen of the schools are fortunate enough to be able to include dictaphone or ediphone operating, the mastery of which should be a great asset to a person who is able to secure a typing position.

Twelve schools thought it was worth while to offer Braille shorthand and only three teach Stenotype, one school having dropped the subject after one year.

The subjects mentioned above are those commercial subjects, the mastery of which might properly prepare a student for a real office position. However, our questionnaire covered a few kindred subjects which may prove of some interest.

The following subjects were taught by the number of schools indicated:

Salesmanship 21
Vending stand operating 10
Switchboard operating 10
Insurance Business (selling) 8
How to make investments wisely 15

The real test of the value of the course under discussion is whether our pupils can make ample use of the training they have received and can secure employment after they graduate.

In listing the number of graduates or ex-students doing office work, six schools reported ten or more. The remaining schools showed that they had less than an average of two from each of these schools so employed.

Our questionnaire did not ask whether those employed had secured their positions recently or whether they had held them over a rather long period of time. Doubtless some have secured office positions recently but replies to other questions would lead us to believe that a great majority had held their places over a long period of years and that the demand for the services of the blind in this field is growing less.

One of our outstanding educators who reported about the largest number employed made the additional statement that "more emphasis should be put on industrial training than on clerical." Another adds: "I should like to see subjects proposed for blind vocational training which are in demand at present and which do not require the capital which most of our vocational training requires."

Regarding the sight of those employed at office work, our replies would indicate that total blindness did not seem to enter into the matter of employment for an equal number of totally blind and partially sighted workers was reported.

The question as to how much emphasis should be placed on commercial training brought forth some varied and interesting replies but for the most part they followed the same general trend.

Four schools believe that a great deal of emphasis should be put upon this course. These are large fine schools, well located where positions are doubtless available to a certain number of capable graduates. These schools have the facilities and a large student body from which they can select brilliant pupils with exceptional personalities to whom they can give this training. I believe we would all agree that they are more than justified in carrying out a full program under those conditions. Unfortunately, most of the other schools are not so well located. We feel sure that they could secure the facilities if the program could be made worth while to the pupils in the matter of securing employment after they leave school.

The opinion expressed by our schools, with a few exceptions, is that we should put very little emphasis upon this subject. Many are agreed that the exceptional pupils should be thoroughly prepared and none should ever be denied where there is a sufficient probability of employment.

One school puts it this way: "Due to the economic conditions, it seems rather futile to go ahead with a complete commercial program for these students."

A leading educator in our profession replies: "Business officers here will not accept blind or partially sighted typists or switchboard operators because they require employees to do so many things that require vision—filing, reading mail, etc. Blind typists are very efficient within their limitations but we must admit there are certain things they cannot do. Our schools should recognize this fact and stop trying to offer a high-powered commercial course comparable to that given in public school."

This is the position in which most of our schools find themselves but this does not mean that they are not doing fine work. They are, and year after year they are sending out from their doors fine capable young people prepared to meet life as they find it, and often they contribute much to the life of the community in which they live.

Even if the commercial field does not furnish opportunities for employment to great numbers of our blind people, we believe there are other avenues for employment that have not yet been explored. If research could reveal these avenues to us, I am sure the schools for the blind would welcome the information and would gladly establish courses which would lead to employment for its graduates.

Since it seems impractical for most of our schools to carry a very extensive commercial course, there is one point on which I am sure all are agreed. Our courses of study should be so designed that in addition to their cultural value they should contain a sufficient amount of business training so that our students will understand the ordinary transactions required in the business world. One school expresses our idea in stating its aims thus: "We aim to give the most thorough training possible which will always be a personal asset, and will in addition be a vocational asset, if opportunities arise."

Before pupils leave school, each should be taught at least the following:

1. Simple business letter forms.
2. Wording of checks.
3. Wording of receipts.
4. Wording of promissory notes.
5. Simple contracts and leases.
6. How to make a bank deposit.
7. How to keep a simple record of receipts and expenditures.
8. How monthly payment plans operate.
9. Charge accounts; their use and abuse.
10. Some knowledge of wills.
11. How to send a telegram.
12. How to answer the telephone and deliver messages.
13. How to receive and direct callers.

The conclusions arrived at as the result of our questionnaire are as follows:

1. Some schools advantageously located to secure employment for its graduates should carry a rather comprehensive commercial course.

2. Exceptional students in all schools where the probability of employment justifies should have training.

3. No pupil who has promise of employment should be denied training for that position.

4. In general, great emphasis should not be placed on commercial training in our schools for the blind and false hopes for employment held out to our students.

5. All students should be given sufficient training to familiarize themselves with the ordinary everyday transactions in the business world.

DISCUSSION

"Aims of Commercial Training in Schools for the Blind—Vocational and Pre-Vocational"

MRS. LOUISE ANDERSON
Iowa

We are happy to learn that some of our commercial students have been successful in the industrial world. It is up to us to do all that is in our power to increase this number. However, I agree with Superintendent Brown that only those schools which are "advantageously located to secure employment for their graduates should maintain a comprehensive commercial course, and only exceptional students where the probability of employment justifies should be given training."

I realize that my experience in this work is indeed very limited, but there are certain observations that I have made which might be of interest to you.

We all realize the importance of type-

writing in any commercial course. The primary aim of every typing course is to enable students to learn to use the typewriter as a writing instrument—to use it freely as they would use a pencil or stylus. The superiority of typewriters over other writing tools depends largely upon the skill which the typist possesses. Therefore, the least that any of our typing courses can offer is to teach the student to type as rapidly and as accurately as he can write with his slate and stylus. Students who wish to type for personal use need the same training up to a certain point as students who wish to acquire a salable vocational skill. One of our state field workers stated that no student should be permitted to graduate unless he were able to write a business letter. She said that it was most discouraging to receive letters from graduates which were so very poorly written. In our school we begin typewriting in the sixth grade. As soon as the students have mastered the keyboard we begin corresponding with sixth grades of other schools. From the reports I have received from other teachers I don't know who enjoyed the letters more—our students or the recipients of our letters.

Mr. Lloyd Jones, one of our leading educators in the commercial field, states that commercial education has two objectives—education for businesslike living and education for businesslike working. From Superintendent Brown's report we can see that the first objective concerns us more. We all realize that a knowledge of business and how it operates is a rightful heritage of all boys and girls, but at the same time we have an obligation to provide an educational training that will enable graduates of our secondary school to begin earning a living.

We must help our students to develop an appreciation of the fact that business is not a vast confusion of jobs and uncertainties, but a field of orderly and well-organized activity in which there are certain principles and functions common to all business. If our students are to become responsible citizens they ought to know about these things because they are an unescapable part of modern living.

We must consider our students as consumers—consumers on the customers' side of the business counter. Our students have to use the common business services all their lives because they live in some business or economic society. There is a great need for consumer education in all of our schools today. In this world of so many imitative products and substitutes we must educate our students to distinguish between the good and the bad. Our students do not come in contact a great deal with family financial planning, so they do not receive the practical financial training that many of the students in the public schools receive. It will not be long before our students are away from the supervision of the state schools, and they should have been given sufficient commercial training to conduct their purchasing wisely.

In our commercial courses we must not only help our students on the consumers' side of the business counter, but we must take them behind the counter where they can see people at work. It is necessary for us to continue surveying the business world to find positions that our students can be trained to fill, and then let the students examine these positions to discover for which position they can best qualitfy. I believe that we can stress the field of salesmanship for our students. Perhaps not actual selling, but the growing field of advertising. Some of our students have written excellent sales letters and copy for advertisements. We enjoyed having radio programs in our classroom in which the students wrote the commercials for the program. I can see no reason why the students of our schools cannot compete with the sighted in this expanding field.

No commercial education course which expects to prepare students for office work can be complete without dictaphone training. I feel that if the student is able to operate a dictaphone it will be an opening wedge for him when he desires to find employment.

Another task that we have is to educate the sighted to the fact that our students are capable of fulfilling many positions in the business world.

Another commercial educator has said that one of the objectives of commercial education should be to help make the pupils aware of the fact that they are paying for the cost of the government. A brief presentation of the government at work with business assists pupils to an understanding that supervision, control, and regulation of business activities by government is reflected sooner or later in the pocketbooks of all people. A knowledge of conservation, business law, taxes, management, and the organization of business is necessary if the individual is to take his place in the community as a good citizen and competent worker.

The happiness and success of every individual is measured by his ability to get along with other people. I believe that the basic purpose of any commercial course is to develop that ability. There is no better place than the commercial course to educate students to the fact that they must co-operate with other persons if they are to succeed in this world.

In closing I would like to point out that "pre-vocational" training embodies many "practical arts" or personal use values which are essential for everyone. Thus much of the work which we teach in preparation for securing jobs performs a double function of preparing for promotional opportunities while on the job and also of preparing students to become more intelligent and efficient citizens in their every-day affairs.

"THE BEST METHOD OF CORRELATING ENGLISH AND TYPING"

ETTA F. KING
Western Pennsylvania

When we speak of the correlation of English and typing, we mean a development of relationships that leads to a more closely knit, as well as a more enriched educational procedure. The ideal method would be to take the two subjects and blend them until they become, in effect, one composite skill. Unfortunately, the ideal and the real are often foreign because the child may be able to use each skill separately, but when he attempts to combine the two, he makes an unbelievable amount of errors. Our problem then is: How eradicate errors?

The first requisite for the learning process must be an enthusiasm, or at least a willingness on the part of the pupil, to work for a desired end, setting mastery of it as his goal. Surely this can be attained more easily if the English and typing departments work together, the English instructor teaching the fundamentals of good English, the typing teacher helping the child to acquire the necessary skill and accuracy in typing, and each teacher seeing that all fundamental principles are carried out in her collection of students' work. It is therefore obvious that each teacher must be familiar with both subjects. Otherwise each will fail in her mission as constructive critic.

In this discussion, I do not wish to deal with the correlation of English and typing wholly from the standpoint of improvement in the expression of the point being taught, but rather as an attempt to have the child reach a point in his mastery of both subjects that he may be able to express with facility and ease the experiences life may bring him. Some one has said, "The mind has a thousand eyes." If this be true, we should attempt to teach the child to describe these pictures in oral and written form in clear, correct sentences. To be satisfactory, a correlated program between the English department and the typing department should not be left to chance but should be planned. As an illustration—About Christmas time, in our sixth grade we attempt to type our

home letters. During the first part of the semester's work, we have used the time to become acquainted with our machines and to acquire a certain degree of facility in accuracy and speed in sentence and paragraph writing. The children write their letters in Braille, under the supervision of the English teacher, then bring them to class and type them. Because they are so keen to do the letters correctly, they quickly learn the form and are soon doing original composition in letter writing.

What are some of the things the child needs as he goes through life? He needs vocabulary, accuracy, and an understanding of composition, logical arrangement, conciseness and good grammar. Vocabularies must be built. This building process includes two special features—knowing the meaning of words and being able to spell the words correctly. All teachers with whom the child comes in contact should contribute a share to helping him acquire this knowledge, but it is usually conceded that the English department should take the major part of this responsibility. It does, however, seem that because spelling must ever be a combination of memory, visualization and drill, and because much repetition is necessary to fix in mind the order of letters in words, the typewriting teacher may be helpful. How? By acquiring misspelled words from other teachers and using them in drill work, thereby helping the child to establish clear perceptions and correct recall. This may be done by writing the words in columns, using the tabulating key, returning the carriage and rewriting the same group of words several times. In this way the child will learn the use of the tabulating keys and correct form as well as correct spelling. Here, too, may be taught syllabification.

Until the skill potentiality is reached, the typing teacher should not cease having drills on speed and alphabetical sentences. In fact, she should do everything possible to make the pupil expert in using his fingers, thus tending to eliminate errors. The English teacher should aid by refusing to accept work that is poorly done. Both teachers should attempt to have the pupil understand that accuracy in expression can come to the student only when he is careful in his selection of words and phrases, and that they mean only what he wishes them to mean.

Dictation plays an important part in original composition, straight copy work very little. In the second semester's work with my sixth grade typing class, we very often divide a thirty minute period into three parts. One of these parts we use for drill work, another for dictation, and the third for original composition. In beginning dictation, the children are told just where to place each punctuation mark. Later, dictation is given in such a way as to indicate proper punctuation through pauses, inflection of voice, and speed—thus leading up to original composition. Remembering that a composition may be any length, from a single sentence to a large number of related paragraphs, we begin with something simple. At first the child may be able to write only a few sentences about very familiar subjects. As he gains confidence and skill, he will be able to branch out into letter writing, themes on purely imaginary subjects and reproductions of stories he has read. Of course, the fundamentals of composition—unity, coherence, emphasis and harmony—must be taught in the English department; but the typing teacher may afford the child an opportunity to exercise his knowledge and skill under supervision.

To be quite effective, there should be remedial work to overcome weaknesses in grammar, typewriting, mechanical setup, punctuation, capitalization, paragraphing, and spelling. When a student persists in making errors of like kind, he should be assigned remedial work to be prepared outside of class. These assignments should be carefully checked and discussed with the student until it is apparent that the same type of errors are no longer being made. Of course, this procedure would mean individual work for both teacher and pupil, as well as complete harmony between typing teacher and English, but, if carried through to completion, would be-

stow untold benefits on the student.

In Senior High School, we use the textbook, "20th Century Typewriting," written by Mr. D. D. Lessenberry of the University of Pittsburgh. There seems to have been much psychological research, especially from a business standpoint, exercised in the production of this book and we accept it wholeheartedly, trying not to forget that to make a pupil adaptable and resourceful, one must create in him a tendency to inquire, observe, and ask questions. If students know why they do things a certain way, they will come to use their typing manual as a reference book. They will be inclined to apply in practical work the fund of information regarding letter forms, drafts, checks, tabulations, stenciling, legal documents, invoices, carbon copies, etc. that has been taught in this way.

Perhaps the classroom can never quite reproduce the exact atmosphere of actual life problems but we attempt to accomplish this insofar as we are able to do so. The high school students understand that they are privileged at any time to bring into class and type any assignments given by other teachers. Working with the other teachers in report writing, letter writing, essay writing, etc., will usually supply the necessary motivation. During the time the children are doing their assigned work from other departments, they are left free to carry out their own ideas. They are, however, encouraged to ask for help, if they need it, which they quite often do. Then the typing teacher has a chance to give instruction in the form of advice, which, human nature being what it is, will be more readily accepted and remembered than if given as a command.

These are only a few of the many ways that the typing department and the English department will be able to benefit by working together. Open minds, willing spirits, and a certain amount of alertness will point the way to successful cooperation.

SECTIONAL MEETING—4th, 5th, and 6th Grades

TUESDAY AFTERNOON, JUNE 25

LOUISE WILBER—Chairman
Arizona

"HOW CAN THE CORRELATION OF CLASS WORK BE MADE AN INTEGRAL PART OF THE LOWER GRADES"

DR. LOUISE WILBER
Supervising Teacher, Arizona School for the Deaf and Blind

According to Mary Weeks in her "A Correlated Curriculum," the purpose of education is to give pupils an understanding of life and the character, information, and skill needed to meet its problems.

There is a predominating belief that the curriculum has not kept pace with the growing needs of children and with social changes. A worthwhile curriculum must be composed of well selected experiences and a balanced, orderly program adapted to the interests and needs of the pupils of a particular grade.

The first step in the movement from subject to the experience curriculum appears to be the correlated curriculum. There are various types of correlation used in many of our public and private schools. One of the oldest forms of correlation is that of English with other sub jects.

There is a general acceptance of the principle that every situation in the school

which requires or stimulates social intercommunication or individual self-expresson in language is the opportunity for developing language ability. This principle implies that every teacher is a teacher of English. The materials and situations arising in the work on the content subjects in the social-science and natural-science fields and in the current life of the school group are more vital and therefore much more effective than any which are set up for the specific purpose of developing definite language abilities. Thus, instead of duplicating in our English classes work that is covered in other courses, the proper correlation of subject matter will prevent the unnecessary overlapping of material that is learned in history, geography, nature study and other content subjects. Repetition for emphasis is important but repetition that is duplication is useless.

In a special course in the Hyde Park High School in Chicago called "Health," correlated with English and general science, the purpose was to make general science more effective. The class was under two English teachers and one health teacher. Pupil secretaries acted as messengers to correlate the English classes with the science classes. Effective results were obtained. Interest was stimulated. Better methods of oral and written English expression were developed. A similar course might be tried in lower grades. The course was so successful that it was extended the next semester. It included the correlation of three subjects: English, health, and music or art.

In the New York Institute for the Education of the Blind, the social studies are correlated, including geography, history, civics, economics, vocations, home management current events, etc. Objective teaching materials which are used in teaching these subjects to the blind include the following: Relief maps, two-dimensional graphs and charts; exhibits of industrial developments; objects and models showing various forms of communication, the history of housing, etc.; tools, and machine models showing production and distribution of power; models showing different kinds of transportation; tools and machines connected with trades in which the blind engage, etc.

A further step in the inter-relationship of subjects is exemplified by the correlation of music with history. Music, songs, hymns, ballads, etc., of various periods of history are utilized through the phonograph and the talking book. Pupils report on such hystoric hymns and songs as "Now Thank We All Our God," from the Bay Psalm Book, sung by the Puritans, "Once to Every Man and Nation" by James Russell Lowell, a protest against the Mexican War, "The Battle Hymn of the Republic," written by the wife of Samuel G. Howe, Founder of Perkins Institute for the Blind, and Honegger's "Union Pacific Locomotive 231," illustrative of music in the industrial revolution.

The program must be within the range of the training and ability of the teaching staff. Even the simplest forms of correlation require administrative direction if opportunities are to be seized as they arise, and if wasteful duplication is to be avoided. If each teacher working alone were to invent separate projects for correlating his subject with some other, several teachers might execute the same projects, and the child's time might be lost in going over the same ground in different classes. The supervisor must assist the teacher in the planning of projects in correlation, observing and criticizing them in progress, and setting up or helping the teacher to establish methods of testing for values.

It is an educational commonplace that elementary education is now organized on an activity basis involving a multitude of correlations not characteristic of the upper schools. The several language arts, including reading, writing, spelling and composition should be closely correlated with each other, much more closely than seems to be the present prevailing practice. The learning of these arts should also be much more closely correlated with other subjects, especially with geography, history, nature study and hand work.

It is the task of education to set up its program in such a way that the child may and will develop the ability to consider intelligently and face courageously certain life problems with some skill in finding possible solutions. After the depression in 1929 the subject curriculum with its basic educational ideas began to decline, and the experience curriculum with its fundamental principles began to increase. The more conscious a school becomes of the need for correlation, the more it attempts to break down subject lines.

During the present decade many states and most of the leading city and county school systems have undertaken to revise or reconstruct their school curricula. Consequently, some schools have set up an integrated curriculum which has grown out of the correlation and fusion of school subjects. The integrated curriculum is the type of curriculum organized and constructed about central themes or "big ideas," so selected as to obtain certain desired outcomes. The determining factors in this curriculum are the present and future needs of children. The integrated curriculum has been set up in course-of-study units. It is necessary for the teacher to develop teaching units and to organize, co-ordinate, and teach them in such a way that the desired objectives of the curriculum may be realized.

The Houston public school system has established an excellent type of integrated curriculum which was begun in the fourth and fifth grades. The initial step in the development of this integrated curriculum was the setting up of controlling themes and blocking out for each grade the materials, scope, objectives and other determining elements for the curriculum. Teachers found that the carrying out of the activity program demands equipment that is fitted to the type of work, such as movable schoolroom furniture, tools for construction work, abundance of reading materials, and so forth. According to Edison Oberholtzer, Superintendent of Schools in Houston, Texas, the principals' report of their observations indicated that children's interests increased as the work progressed with the integrated curriculum. The children read many more books and became more independent in doing the work of the classroom. They developed initiative and creative power in approaching and in completing projects chosen by the individual child or by the group. They showed greater appreciation for the rights and opinions of others, and were inclined to take pride in achieving satisfying results. In Houston, parents considered the integrated work quite an improvement. They noticed that it appealed to the uninterested children; they observed that their children were more interested in books, newspapers, magazines, and in the reading of a better type of literature, some of a more cultural type. The parents particularly noted that the children acquired without distaste the skills in the fundamental subjects.

In the elementary schools of Tulsa, Oklahoma, instruction in reading, language, penmanship, and social studies for grades four, five, and six is integrated about the centers: nature and conservation, industry and invention, citizenship and world service, travel and world friendship, transportation and communication, history and biography, cultural background and holidays. These themes are all treated in each succeeding year, but the following outline for the handling of the first five themes indicates that the themes have been divided into various phases which are separately treated at each level.

Nature and Conservation—Grade 4—In what ways do plants and animals contribute to the welfare of man? Grade 5—What forms of wild life should be protected and what forms should be destroyed? Grade 6—Why should we arouse sentiment in favor of protection of wild life, and how this may be done,

Industry and Invention—Grade 4—What are the contributions of others in supplying the necessities, conveniences, and comforts of life? Grade 5—How are machines making life easier? Grade 6—How are the workers of today conquering the world?

Transportation and Communication — Grade 4—How has man discovered and developed swifter means of transportation and communication? Grade 5—How do communication and transportation make the world grow smaller? Grade 6—What qualities do men have who develop swift and safe means of transportation and communication?

Citizenship and Service—Grade 4—What are the qualities of a good citizen? Grade 5—What can a Good Citizenship Club do to help the school and community? Grade 6—What duties may I, as a citizen, be called upon to perform and how can I prepare for them?

Travel and World Friendship—Grade 4—What may we learn of the boys and girls of other lands using books as our means of travel to their countries? Grade 5—How do foreign people resemble us and differ from us? Grade 6—What qualities do the people of other countries have which should make us feel friendly to them?

The installation of an integrated curriculum must be planned carefully and must make the necessary evaluations, revisions, and readjustments. To install such a curriculum most effectively there should be provided:

a. Laboratory schools.
b. Testing procedures.
c. Adequate supervisory services.
d. Selected study groups.
e. Qualified appraisal committees.
f. Special remedial adjustments.

In some schools core activities are undertaken which involve the work of an entire semester; in others the activities have smaller scope and consist of a series of separate units.

Core projects of an entire year can be grouped about core activities as follows:

Unit of Work—Finding How We Get Our Food.

Functional Centers—Conversation. Discussion. Relating personal experiences. Letters—Reports.

Language Skills—Readiness to speak. Knowing what one means to say. Using good beginning and closing sentences. Using good letter form. Capital for beginning and closing sentences. Period at end of sentences. Capitals for names of places.

Types of Reading—Reading to set up problems for investigation. To enrich ideas of text from experience. To use library to get information on problems. To enlarge meaningful vocabulary. To use table of contents. To use index. Listing foods and tracing origins so far as class experience goes. Excursions to grocery, wholesale market, truck farm and farm. How foods are kept clean and fresh in transit and on display. Intensive study of a few important foods such as milk, bread, oranges, and beef.

Arithmetic—Current prices of foods. cost of meals for a day — for a week. Making change. Making out bills. Measures of weight, liquid and dry measures, dozen.

Fine and Industrial Arts—Chart showing balanced meals. Peep-shows of food growing and food preparation.

Other projects or core activities which could be used are:

Finding How We Get Our Clothing.
Making a Home-Room Library.
Finding Out About Home Life Around the World.
Making a Department Store.
An Imaginary Airplane Journey.
The Westward Movement.
Dairying Throughout the World.
Ways in Which Farmers in a Particular Section May Improve their Corn Crop.
How May We Improve Health Through the Control of Disease?

These projects in the integrated curriculum involve not only the use of the hammer and saw, but the employment of English, writing, reading, history, geography, science, arithmetic, field trips, interviewing, the evaluation of information and the making of solutions.

The correlated or integrated curriculum can be carried on best under a system that is not departmentalized. In a boarding school like our schools for the blind, there are excellent opportunities to integrate the entire life of the pupil. According to

Ellwood P. Cubberley in "The Portland Survey," the purpose of the elementary school should be to furnish a rational, normal environment, in which the pre-adolescent child may live and grow without fear, oppression, or repression. Beauty, faith, joy, interest, and play should characterize it all. He should imagine, sing, dance, laugh, play, act, . . . construct with his hands sow, cultivate and reap, imitate, love, breathe, and eat. He should attain efficiency in reading the printed page mastering the fundamentals — addition, subtraction, multiplication, and division— in number combinations, learn to write a legible free hand and to spell with a reasonable degree of accuracy. In acquiring these attainments, however, his little mind must not be befogged by dead academic stuff, nor his buoyant spirits depressed by fear, envy or hate.

In our schools for the blind, we must get away from the traditional curriculum based entirely on subject matter. It is essential that we reorganize our material so that it will be more meaningful to our pupils. We should urge our publishers to keep abreast of the times. "The Unit Activity Series" in language, by Hatfield, and the "Unit Mastery Arithmetic'" by Stone and Mills are steps in the right direction. Instead of following texts, page by page, it would be well for us to organize our material and index it in such a way, that we could really teach children, rather than subjects. We should construct our curricula around central themes based on the needs and interests of our pupils, rather than on abstract subject matter.

As it is more difficult for the adult blind to succeed in life than for the normal person, we should do all in our power to be of assistance to our visually handicapped in preparing them to meet their present and potential problems. We should develop curricula which will provide greater opportunities for individual investigation and solutions, for making decisions and criticisms and for creative endeavor.

Our schools should take advantage of the school surveys of the American Foundation for the Blind. Observation of the work that is carried on in the more progressive schools for the seeing will help us better to evaluate our own work in comparison with theirs.

In our schools for the blind more experimental work must be carried on. It would be well for us to take advantage of the splendid achievements of the various laboratory schools for the seeing, such as Lincoln School of Teachers College, Columbia University, Park School, Baltimore, Maryland, and the Elementary School of the University of California at Los Angeles.

The teachers of the blind ought to follow not only minimum state requirements but they ought also to be expected to improve their professional status by frequent attendance at university summer sessions and by the reading of up to date literature on education. In order to judge progressive education wisely our teachers must become familiar with its theory and practice.

We cannot use the excuse that our schools are so specialized that we are unable to derive any benefit from the study of public school systems.

If we are to prepare our boys and girls to live in a world with normal people we must avail ourselves of every possible opportunity to guide our pupils in the direction that leading educators feel is of most worth.

Bibliography

Bardwell, Richard W.—"A New Emphasis in Language Teaching" Elementary School Journal Vol. XXXIV, No. 2. October 1933.

Cubberley, Elwood P.—The Portland Survey. The Portland Survey-School Efficiency Series, World Book Company, Yonkers-on-Hudson, 1915.

Chart Showing Kinds of Unit Organization. Curriculum Journal, Vol. 8, No. 3, March 1937.

Hopkins, L. T. and others. Integration—Its Meaning and Application, D. Appleton —Century Company Inc., New York, 1937.

Kirby, Louise L.—"An Experiment in Correlation." The English Journal. Col. XXVI No. 6, June, 1937.

The New York Institute for the Education of the Blind Bulletin 999 Pelham Parkway, New York City, 1938.

Oberholtzer, Edison E.—"An Integrated Curriculum in Practice." Bureau of Publications—Teachers College, Columbia University, New York, 1937.

Weeks, Ruth Mary, Chairman, A Correlated Curriculum. A report of the committee on correlation of the National Council of Teachers in English. D. Appleton and Company, Inc., New York, 1936.

"OVERCOMING THE PHYSICAL AND MENTAL SLUMP IN THE INTERMEDIATE GRADES"

LOUISA WALKER
South Carolina

We would like to ask three definite questions and then attempt to answer those same three questions in a practical way. In making an effort to overcome the physical and mental slump in the intermediate grades we ask:

1. What is our most important problem,
2. What is our aim,
3. What are some of the practical ways by which we can attain our aim:

First of all we have as the center of interest the child. You should know him just as he is—egoistic, thoughtless, blundering, rough, noisy, rude, unmoral, and unsocial. He is unmoral rather than immoral and unsocial rather than antisocial. He is apt to have bad manners, slovenly habits, and disrespect for authority. His interest is literal and factual; he is restless and craves activity. He gives evidence of increased stability, better muscular control, and greater vitality than the primary pupil. He has more controlled imagination, some slight powers of reasoning, and an intense curiosity about all kinds of things. Memorizing, drill and routine are still acceptable although their charm becomes less and less. He is interested in collecting and now the gang idea has a powerful influence in his life. At this time you teachers should give the child the understanding which he needs. This is often proposed but seldom done. Expect him to like you but do not expect him to love you as he did his primary teacher. The relationship of the teacher to her class in the intermediate grades should be one of friendship and understanding rather than the emotional bond which characterizes the earlier years. Do not let the child cling to you for this denotes immaturity. Be his friend. He is now in an intermediate social and emotional state between early childhood and adolescence. His characteristics are, however, absolutely normal and he must be dealt with just as he is and not as his teacher wants him to be.

Thus we find that the intermediate child has normal characteristics—some good and some not so good. Surely he is not the chief problem of the intermediate teacher. What, then, is her real problem? Here is a quotation from a leading educator which should answer our question in no uncertain terms. "If only one factor in the child's maladjustment can be changed, the attitude of the teacher will usually be found to be the most important and its alteration most immediately effective in bringing about improvement." But just how well are teachers adjusted? Based on recent studies the concensus of opinion is that they are more poorly adjusted than the average person. In undertaking seriously this task of teacher adjustment the entire life of the intermediate child will be seriously affected. There will be a change in the teacher's manner, in her attitude toward and her understanding of the child, in her interest in his social and physical well-being and his personality adjustments, in her methods of

teaching, in the physical appearance of her classroom, in the curriculum, and in other ways far too numerous to mention.

In our limited time it is not necessary for us to mention the teacher who is entirely satisfied with her results or the teacher who is reaching highly successful goals. Let us talk rather of the intermediate teacher who desires to grow and to improve. For every teacher there are three methods of adjustment: (1) direct attack, (2) compensation, (3) flight. In direct attack the teacher sees herself as she really is, faces facts, and attempts to remedy her shortcomings. In compensation, the teacher substitutes what she knows for what she does not know and tries to hide her weaknesses. In flight, the teacher will never admit that she is running away so she must invent some excuse for her action. Quite often she will place the blame for her shortcomings upon the Superintendent, the principal, the parents, the housemother, or (worst of all) the child. Usually she is not aware of her irrational conduct for the ego is a clever deceiver. There are numerous types of teachers who in one form or another show lack of adjustment. One is the "sour grapes" teacher. She makes a lazy stab at the methods and ideals of modern education and then with a satisfied air freely admits that the old way is by far the best. There is the intermediate teacher who complains of her slow class, the antiquated books, or the school's lack of equipment. There is the teacher who cannot approve of any up-to-dateness which is introduced. She is skeptical of the radio in the classroom, the new type of library, a modernized reading program, a testing program, or a daily schedule in which the child has plenty of opportunity to make use of his time in his own way. She has a smug and stifling certitude that whatever is labeled new or progressive is either no good or has always been a part of her own teaching. Then there is the teacher who has never become emotionally mature. She must be handled with kid gloves by her principal and her associates; she cannot take criticism however kindly or constructive; she is uncooperative and selfish; she is irascible and tempestuous. There is the suffering hero type who pities herself constantly not only privately but also publicly. Still another is the teacher who must dominate and ever be the center of the stage; she is opinionated, talkative and domineering. And then there is the individual who has never adjusted herself to the adult point of view. From a study based upon their own answers children violently object to the following qualities found in teachers: crossness, crabbedness, grouchiness, nagging, sarcasm, loss of temper, meanness, intolerance, ill-manneredness, superiority, aloofness, haughtiness, and so on. If becoming an adult means the putting away of childish things for people generally, it is doubly imperative in the teacher. Let the teacher who would teach the whole child and the emotional child in the intermediate grades beware lest she herself is a child in her emotional evolution and so but a blind leader of the blind.

Have you in your everyday teaching a definite aim or goal? If so, what is it? If you think of the intermediate child only in terms of his mental powers and his ability to glean certain facts from different sources and then repeat these facts, you are neglecting some very vital aims of modern education. Personality development and social development have now become important phases of modern education. If on the other hand you teach your pupil to use his mind thoughtfully; to incline to the right and the just; and to despise and shun the wrong and the unjust; to develop virtues of tolerance, wide sympathies and deep appreciation; to glean something of the meaning of citizenship at its truest and best; to cultivate intellectual thirsts and interests that will carry out measurably into life beyond the school years; to feel within him something of the wonder sense; to taste often enough of the thrill of success to know how satisfying it is; to consistently experience the pleasure of honest work and the joy of conscious achievement; to acquire the habits of industry and thoroughness; to learn to work

with others without shirking his own responsibility; to develop confidence in himself and confidence in others; to succeed in conquering his own fears, worries, and inferiorities; to overcome his inhibitions and conflicts; to cooperate with the group either as a leader or a follower. If he has learned all of these things then the product of your teaching may be truly said to be educated in the highest sense of the term. Are you as teachers of intermediate children basing your everyday teaching upon these broad objectives of modern education?

And now we come to the most practical side of the problem. In the face of all of these facts, what should the intermediate teacher do to attain a worthwhile goal? First of all, let me suggest that you find a way to be happy in your work. You must definitely enjoy the privilege of being a teacher and know the thrill which comes from dealing with children. If you do not enjoy your work, examine yourself, find the reason for your failure, and remedy it. If this is not possible then perhaps your success will be found in another field of work. Today the subject of mental hygiene is of vital importance. Only recently a splendid book on mental hygiene from the teacher's point of view has been published and every teacher should study its contents. If no other work of the kind happens to be available then begin by reading Dale Carnegie—"How to Win Friends and Influence People." The lawyer is not a lawyer for twenty-four hours out of every day. Neither should the teacher be a teacher all of the time. It is not necessary for her to show constantly by her dress, by her manner, and by her actions that she is a teacher. Be your own natural self.

Do you actually know the children whom you teach? Do you know them as individuals and as a group? For years the teacher in the classroom has in her own way been an authority on child psychology and she should be just that. Recently, however, the mental hygienists have begun to insist that many of us do not actually understand the children whom we teach. Based on a recent study, we find that the average teacher believes that transgression of authority in the classroom is about the worst form of lack of adjustment in the child. However, the mental hygienist tells us that this trait is of minor importance and should be given very little consideration. He considers withdrawing, recessive personality and behavior traits as the most serious lack of adjustment. The teacher places this characteristic at the very bottom of her list and considers it of almost no importance. One mental hygienist in discussing some undesirable traits of childhood has gone so far as to say, "If the teachers but realized it, it is their behavior and not the pupil's that needs attention." And so we ask once again, "Do you really know and understand the children whom you teach?"

In your teaching remember that the child must go to school for a few years and then he must live in a world of competition. The training of his mind is not necessarily an end but perhaps a means to an end. He must adjust himself and his own personal problems to the world about him. His personality should be of vital concern to you. There are significant physical signs of maladjustment such as:

Twitching and fidgeting
Constant drumming with the feet and fingers
Making faces
Stammering, stuttering, and queer breathing
Biting fingernails
Nervous mannerisms, etc.

Have you noted any of these signs of maladjustment in the intermediate blind child? If so, you have a wonderful field of opportunity whose neglect is very dangerous and perhaps criminal. The child's social life is also the direct responsibility of the teacher and should be a definite part of her teaching. His leisure time is your concern. If his schedule is so arranged that he must perform certain tasks at a set hour of the day throughout the entire day, then our schools are turning out machines and not human beings. He

must have plenty of leisure time. If he wastes it, then he must suffer unpleasant consequences. Learn to teach the whole child and not the part child.

Be modern—be up-to-date. Adopt the best and reject the worst. No matter how much you reject, keep yourself informed on the trend of modern education. Books and magazines are now pouring from the presses of our country. Read them. Know the public schools of your State for after all the blind child will have to live with individuals who are educated in these same public schools. A teacher in another field of specialized education recently remarked, "During the past five years the public schools have adapted methods which we have used for the past twenty-five years. They are, however, now at least five years ahead of us in the use of these identical methods." Finally, we say—teach the whole child and not just one small part of him.

And then there is a suggestion which may at first appear to be of minor importance but it is in reality vital for it affects everything which the teacher does or hopes to do. In all of your teaching, you must have a clear-cut, definite aim. It cannot be some notion or idea which is rather hazy in your own mind. It must be definitely stated in concrete terms and kept constantly in mind from day to day. Some teachers go into their classrooms with no idea of why they are teaching a certain thing or what they expect to achieve. This is a criminal waste of time and neglect of responsibility. Have a plan or an aim—right or wrong—but have one.

And finally in your teaching during each year, pick out some definite phase of your work about which you want to know more and more and in which you are definitely interested. During the past year a teacher in the intermediate grades of a school for the blind selected the teaching of reading for better living as her hobby, so to speak. She was not satisfied with the results of the old method where there was a definite set period for oral reading when the child was compelled to read aloud while the other members of the class listened. She consulted her supervising teacher; she interviewed successful teachers of reading in public schools; she bought the best books on the subject of reading and gleaned from them the most up-to-date methods and practices; she stated her aims definitely; changed the entire program of her reading period; and then continued to work like a Trojan to accomplish results which she believed worth while. At the end of the school term she walked into her Principal's office and remarked, "This has been the most wonderful year of my whole life. I have worked harder than ever before, but I have learned so much, and found so many things which I want to learn." This teacher is young, attractive, and very popular socially. But to her the knowledge of the work which she had accomplished in reading with her third grade class gave joy and satisfaction which was of paramount importance.

This short talk has of necessity been sketchy. In no one respect has it pursued to the limit even a small part of the subject. With some of the suggestions you may perhaps agree, with others you may violently disagree. However, the author will be flattered if you have made note of a few of the points and at some future date in your teaching prove that they are either right or wrong. New practices in modern education are judged in only one way. They are judged by their results. You as teachers of intermediate children will be judged in future years by the adult lives of the young girls and boys who are now under your guidance and direction.

DISCUSSION
"OVERCOMING A PHYSICAL AND MENTAL SLUMP" IN THE INTERMEDIATE GRADES"

OSCAR NEWMAN
New Mexico

It is an established practice of this association of having discussions of papers for the purpose of informing the group what the speaker has said. The discussion of this paper is rather unnecessary. Miss Walker has presented her paper so clearly that there is little that I might add. Her discussion has been very concrete and to the point.

I felt that when the subject was announced that it should be prevention rather than remedy. I think that her treatment brings this out. With this in mind I tried to find whether there was any reason for a slump in these grades. In schools for the blind two or three years might, in many instances, be added to those given in the paper, thus placing them at from eleven to fourteen years. This brings the group into the period of adolescence, further complicating the problem, chiefly emotionally.

The point that definite goals should be set is well explained and illustrated. A few suggestions might be added. The child should be made to feel that he is learning. There should be a gradual increase in the difficulty of work. No teacher should attempt to teach all the first time, but remember that the child is to be in school for a number of years, and must have something to learn in those years. Remain on the level of the child and be concrete. Many ideas that appear concrete to the teacher are very abstract to the child. Do not bore with too much review but try rather to make new applications. When it is difficult for the child to learn, do not feel sorry for him to the extent that he need not learn but try to lead him into ways of solving for himself. The child will find compensation in being able to solve for himself.

Little need be added to the suggestion for the improvement of the teacher, but solving the problem for one teacher is not always solving for another. Some help may be gained. The teacher must be resourceful. His group is not entirely like another group; he is not like other teachers.

If Miss Walker thinks her paper is sketchy, I think the discussion more so.

—Oscar Newman.

SECTIONAL MEETING — GEOGRAPHY

TUESDAY AFTERNOON, JUNE 25—2:30 TO 4:30 O'CLOCK

W. W. SPELLINGS, Principal, Tennessee, Chairman

"GEOGRAPHY: A HUMAN, DYNAMIC STUDY"

W. W. SPELLINGS
Principal, Tennessee School for the Blind

Geography is a human, dynamic study. It is dynamic in that activity is one of its basic principles. It is human in that it is largely concerned with man and his relationship to his environment.

One has to do only a limited amount of research to become convinced that geography has had a changing definition and a changing scope of material included in its field. During the first decade follow-

ing the Civil War and for a period prior to this war, geography was in the descriptive stage; and it was usually defined as a description of the earth. From the descriptive stage, it passed into the distribution stage. Its chief function then was to account for the location of places and things upon the earth. During the distribution stage and even before this period, many people felt that geography should be confined mainly to a study of the physical features of the earth's surface. Thus geography passed into what may be termed the physiographic stage. It is apparent that such a view of the purpose of geography limited it to physiography. Since physiography is properly a branch of geology, it tended to limit geography to a study of the inorganic features of the earth; and man as an inhabitant of the earth was largely excluded from this study. Prominent geography teachers pointed out that the field of geography should include more than a mere study of the natural features of the earth's surface, that it should include man. "Thus, Professor Ralph S. Tarr of Cornell University, defining geography as 'a study of the earth as the home of man,' declared in 1900: 'I do not believe that the teacher of geography has any right to treat of young, mature and old valleys; nor of the destruction of lakes by filling; nor any other purely physiographic principle or phenomenon for the sake of the thing itself.'" 1. So, early in the twentieth century, leaders in the field of geography began to think of it as a study of the relationship between the earth and living things on the earth. This may be considered the environmental stage of geography, since it combined physiography and ontography; that is, it combined the study of physical environment with the study of life in that environment.

The more modern tendency has been to make man the central idea in the study of geography. Pure physiography is a natural science. A study of living things in their relationship to physical environment establishes a contact between the natural science, physiography, and the social science, a study of man. So we may say that geography is now in the social stage; it is classed as a social science. Some would argue that geography is human ecology, that is, a study of the relationship between man and the natural environment in which he lives. Man's environment includes not only the inorganic features of the earth, such as mountains, valleys, water bodies, climate, mineral deposits, and soil; but it includes living things also, both plants and animals.

1 *Huntington, C. C. and Carlson, Fred A.: Environmental Basis of Social Geography. Prentice-Hall, Inc., New York,* 1929.

The brief discussion above shows that geography has had a changing definition and that it has passed through dynamic periods of development and has become a human study. In its human or social stage, geography is in a position to render a valuable service in our schools and colleges. This is true chiefly because, as a social science, geography helps man to understand better his environment and consequently to adjust himself more effectively to a changing world.

Among civilized man's primary physical needs are food, clothing, shelter, fuel with which to drive his machinery and heat his home in winter, and tools with which to work. If he is to live above the level of the savage, he must gather from the surface of the earth the raw materials with which these needs are supplied. These raw materials must be fabricated into economic goods and these goods must be distributed.

There are about 2,000,000,000 human inhabitants on the earth. They are daily engaged in a struggle for existence. Their chief interest is to supply their physical needs mentioned above. They have 57,000,000 square miles of land and 140,000,000 square miles of water from which and by means of which their needs must be supplied. In gaining a living, people have learned to engage in the basic occupations of hunting, fishing, grazing, lumbering, mining, agriculture, manufacturing, and commerce. These occupations are basic because, without them, other occupations

could not exist; that is, other occupations are based on them. These basic occupations constitute the backbone of man's economic life; and they rest squarely on geographic factors and flourish in accord with conditions of geographic environment. This assertion is easy to prove. Let us take agriculture as an example.

More than a billion people on the earth are engaged in agriculture or farming for the purpose of earning a living. These people produce the cultivated crops and the domestic animals, which supply the food and most of the clothing for people engaged in all occupations. But farm crops and domestic animals thrive best in regions where they are most favored by geographic conditions. Most of the world's agricultural crops are produced on fertile plains where soil, temperature, and rainfall conditions are favorable to the cultivation and growth of crops and where the farmers find a healthful and invigorating climate.

Many desert regions have fertile soil, which would produce excellent crops if rainfall were sufficient. In such regions, the sparse nomadic population must rely on animals for a living. Sheep, goats, donkeys, and camels are raised and are pastured on a wide range. The spots called oases are places where more moisture is available. The water may be secured from mountain streams which spread out over the plains and serve for irrigation. The oases usually support far more people than the unwatered surrounding regions. Egypt is an example of this. It is a great oasis in the Sahara Desert, watered by rains that fall on the mountains of Central Africa and supporting 12,000,000 people.

Agriculture in the rainy equatorial regions is next to impossible. The soil here is fertile, but the farmer is confronted with difficulties due to tropical temperatures and heavy rainfall. When the American pioneers cleared the forests as the frontier migrated westward, they cut the trees during the cool weather of autumn or in winter when the bracing temperatures encouraged men to do hard work. Think how different it would have been if the work of clearing the forests had been done on hot, muggy days under a tropical sun. After the forests have been cleared in the rainy equatorial regions, the would-be farmer is still confronted with almost insurmountable difficulties. The warm temperatures, the high atmospheric humidity, the heavy rains, and the twelve-months growing season cause such a rapid and luxuriant growth of grass and weeds that the useful plants are choked and kept from growing in spite of what may be done by the farmer. Therefore, agriculture on a large scale in the rainy tropics has not yet been found practicable.

To what extent is agriculture carried on in mountain regions? Here, as in other places, the determining factors are geographic; for they include relief, climate and soil. It has been mentioned above that most of the world's agricultural crops are produced on the plains. The relief of mountains is too rugged for general farming. However, such crops as coffee, tea, and fruit thrive best on hillsides and on gentle mountain slopes where they find better light conditions, more satisfactory soil drainage, and greater protection from frost. Considerable agriculture is conducted on the floors of mountain valleys and in some plateau regions. But when land is cultivated in regions of rugged relief, erosion becomes very active because of steep slopes. And the soil soon becomes poor and unproductive and gullies develop. This evil may be prevented by contour plowing and terracing. But these methods require a great deal of hard and persistent work and rarely lead to profitable results for the farmer. Mountain climates where the altitude is not too high favor the growth of grass and trees. Consequently mountain regions serve man best as areas for grazing livestock and for production of trees. However, high mountain crests often extend above the cold timber line and are barren because of low temperatures.

Agricultural crops cannot be grown in polar regions because of low temperatures. The only vegetation growing here con-

sists of mosses, lichens, and grasses. There is no tall vegetation. The Lapps of northern Eurasia and the Eskimos of northern Alaska and northern Canada raise herds of reindeer that find pasturage on the tundra vegetation. The reindeer supply milk, meat, and hides for clothing and tents.

So it is apparent that man's most important occupation, agriculture, can be conducted only in regions where geographic conditions permit the growth of crops. All other occupations are influenced either directly or indirectly by such factors as temperature, humidity, rainfall, proximity to bodies of water, soil, and relief features. These factors are geographical. Thus we see that man's economic activities must always be accountable to the geographic environment in which they are carried on. If we were permitted to write at length, convincing evidence could be presented to show that not only man's economic pursuits but also his ethical codes rest on factors of geographic environment. A quotation here from Ellen Churchill Semple is pertinent. 2. "'Civilization is at bottom an economic fact,' at top an ethical fact. Beneath the economic lie the geographical conditions, and these in the last analysis are factors in the formation of ethical standards. The question of slavery in the United States was primarily a question of climate and soil, a question of rich alluvial valley and fertile coast-land plain, with a warm, moist, enervating climate, versus rough mountain upland and glaciated prairie or coast, with a colder, harsher, but more bracing climate. The morale of the institution, like the right of secession, was long a mooted question, until New England, having discovered the economic unfitness of slave industry for her boulder-strewn soil, took the lead in the crusade against it. The South, by the same token of geographical conditions, but conditions favorable to the plantation system which alone made slave labor profitable, upheld the institution both on economic and moral grounds." If factors of geographic environment play so prominent a role in human affairs as to determine both the economic activities and the ethical standards of man, geography is necessarily not only a dynamic study but also a human study.

2. *Semple, Ellen Churchill: American History and Its Geographic Conditions. Houghton Mifflin, Company, Chicago,* 1903.

"GEOGRAPHY AS AN AID IN THE INTERPRETATION OF HISTORY"

GRACE KOEHNE
Indiana

The shape of the earth has always been of importance in history. All life is conditioned by natural forces. The distribution of heat, rainfall, bodies of water, and land formations over the earth has affected man directly and indirectly. Storms, floods, and earthquakes may immediately affect man but the more subtle influences of climate and place are often more lasting.

The influences that condition history are mainly human and geographical. The sea may be both a barrier and a means of communication. To an agricultural people, the sea would naturally be a hindrance. To a sea-going people, it would be an aid. Geography has determined the course of history a vast number of times, but as civilization advances man has been better able to surmount the barriers of nature.

"The empire of climate is the first of all the empires," said Montesquieu. It affects man through his manner of getting a living. Man appeared on earth, as far as our knowledge goes, about 50,000 B. C. just preceding the last stage of the Ice Age which began about 40,000 B. C. and lasted in Sweden untill 6,500 B. C. From 18,000 to 8,000 B. C. the Atlantic rain

storms crossed the Mediterranean and western Asia, making it savanna country, similar to what is jungle territory in Africa today. During this time people lived in this grassland country at the Old Stone Age of culture by hunting. In 6,500 B. C. when the glacier retreated from Sweden, the rainstorm belt and climate in general became what it is today in the world. When the climate changed, some people remained to think up new ways of life; some took up nomadism or cattle driving in search of scanty pasture; and some followed the wild game upon which they depended.

About 5,000 B. C. more or less simultaneously, a neolithic culture of villagers who made pottery and had some skill in other crafts appeared along the Nile, Tigris, Euphrates, and Hoang-Ho or Yellow Rivers. Change of climate must have had its effect on life in the New World as well as in Africa and Asia. The remarkable Maya civilization of Yucatan in Central America which flourished as it did during the period 100 B. C. to 350 A. D. could hardly have existed under the jungle conditions of heat, rainfall and vegetation that exist today.

Geographical position has also played an important part in the history of the world. Position remains absolute in one respect, but remains relative in respect to the known and habitable world. Britain is as far away from Greece as the crow flies as southern Spain, but civilization reached Spain 500 years before it reached Britain. Britain was at that time unknown, gradually moving into the edge of civilization and finally becoming the very center of civilization.

The nations that rose to world power all had climatic handicaps, found in the temperate zone. In 6,500 B. C. when the change in climate with its relatively scanty rainfall came, those people who remained in the river valleys of the Tigris, Nile and Hoang-Ho or Yellow Rivers had to find new ways of sustaining life, i. e. agriculture. But these places were sheltered and protected owing to the peculiar situation of each.

The location of the Nile River valley was a great factor in the early growth of the Egyptian civilization. Protected on both sides of the river by desert, on the south by the hard rock and desert which comes within a yard or two from the river's side in the Upper Valley, and to the north was the sea in the days when the sea was unknown, all made an ideal place for an early civilization. Egypt indeed is the gift of the Nile. Life depends upon the annual flood of the Nile, and life is possible only along the ten-mile-wide strip bordering the Lower Valley. The difference between the Lower Valley and Upper Valley is due to the rock formation. The river in the Lower Valley flows through a limestone territory and in prehistoric times it had worn a valley and then filled it with silt brought by the floods from Abyssinia. The Upper Valley has a sandstone formation where the river has worn no valley, but merely has gorges separated by cataracts. For 4000 years or possibly 5500 years the Egyptians never saw an invading host in their midst.

It was not to the inherent excellence of its inhabitants that the advance of the Egyptian state is due, for notwithstanding the extent to which the land is protected, we find that two if not three separate races successively inhabited the land in times known to history, and each possessed a high standard of civilization for the times in which they lived, and reached a much more successful state of civilization than did the inhabitants of other lands at the same time. And when Egypt fell from her proud estate, geographical conditions still exercised their control on her history, and not the least of them was the same protecting influence of the desert, for in the 4000 years during which Egypt stood alone, her inhabitants so learned to trust to that protection that they never have been able to stand against opposition. Since 330 B. C. Egypt has never been independent.

Other geographical conditions produced

more successful civilizations. The Tigris-Euphrates River valleys were protected as the Nile valley was protected, but not so completely by the steppeland, marshes and swamps on three sides. Yet although civilization started in both Egypt and Mesopotamia at apparently the same time, the Babylonians had learned how to make bricks, build homes and towns and made canals before the Egyptians. Yet Egypt had been welded into a single state a thousand years before the first Babylonian Empire under Sargon in 3800 B. C. The flat, level, fertile land was suited for irrigation and agriculture. Outside of the swamp, steppe and even desert that surrounded the heartland of Babylonia was a hilly country unsuitable for agriculture, whose inhabitants invaded by turns the highly civilized region of Babylonia. The Elamites, the Kassites, the Assyrians, the Persians all invaded the heartland by turns and assumed the Babylonian culture. In all this history, the geographical control is evident. Geographical conditions had stimulated the hill people to protect themselves. Just as long-continued exposure to protected conditions evolved races in Egypt and Babylonia almost incapable of protecting themselves, so continued exposure to conditions requiring self-defense reacted in producing races in whom fighting for its own sake was an essential of life. To the Elamites, the Kassites, Assyrians and Persians succeeded Greeks, Romans, Arabs and Turks, so that after 3000 years in which its original defenses have counted for nothing to men who have reached a more successful civilization, it is no wonder that Babylonia is now little more than its original swamp and desert.

Pathways, roads, whether by land, water or air, have always been influential in history. They are the instruments by which peoples and ideas were diffused and commerce, travel and war were conducted. The means of locomotion were devised to suit geography. Lands of easy movement have been of plain or plateau level, with silt above limestone with sand and gravel which supports a vegetation-cover, not of trees and underbrush, but steppe or grassland vegetation. Civilizing influences moved westward into Europe from Mesopotamia because of the exceedingly high mountain ranges and vast desert that even today greatly hinders land transportation to China.

One great land pathway was through the Ural-Caspian gate, diagonally across Europe to modern Belgium. Others were through the Danube into Hungary, or through the Moravian Gate into Hungary. The sea has always been one of the greatest pathways, and it was by sea that the first civilizing influences came into Europe.

Phoenicia, on the eastern Mediterranean with its small fertile strip along the coast but surrounded by timbered mountains was also favored by nature. The Phoenicians were a peaceful folk who took to trading at sea, and very early had trading stations dotting the Mediterranean as far as Gibraltar. The main civilizing influences reached Greece through the Cyclades which form stepping stones from Asia, and Crete which lies halfway to Egypt.

Greece, including the islands of the Aegean and the Greek cities on the coast of Asia Minor, all looked toward the Aegean Sea. They were protected also by the sea, the mountains and desert territory at first. They built up a peaceful agricultural civilization. About 1000 B. C. an invasion from the north entered the Greek mainland and gradually assumed the Greek culture. The rivalry between the new and the old, of Spartan against Athenian, necessitated some defense. Sparta developed an army and Athens centered her attentions on a navy. When the great land power, Persia, attacked the Greeks, it was the sea that was the deciding factor. Persia had a far greater army and a much superior navy than the Greeks, as it had confiscated the Phoenician vessels and those belonging to the Greek city states in Asia Minor. Why did Persia retire permanently from the contest? Partly because the sea was to them unfamiliar and unknown.

Many other examples could be given of geography as an aid in the interpretation

of history, and the more thorough the knowledge of geography possessed by the blind child, the more able he is to interpret history accurately.

History is conditioned by man and by nature, but even the great geographical factors of climate and position do not always condition society. There are several puzzles in history in this respect. Regarding position, it is true that the Atlantic tides keep the harbors of the British Isles and central Europe free from silt and thus make ocean-going commerce easier. But Ireland is more favorably situated than England and was more important during the early Bronze Age, 3000 B. C., when England and France were backward. The Romans conquered Britain for strategical reasons than for intrinsic wealth. Some of the people in southern England had supported their kinfolk in Gaul against Rome. Again, if climate has a direct effect on man's mental, physical and moral makeup, why were Europeans the most sluggish and backward of peoples between 5000 and 3000 B. C.? And now for the more recent puzzle. Will the conquest of the new pathway, the air, condition mankind, or will it remain one of the puzzles of geography?

SECTIONAL MEETINGS — KINDERGARTEN

1st, 2nd and 3rd Grades

TUESDAY AFTERNOON, JUNE 25—2:30 TO 4:30 O'CLOCK

MRS. MAY HAMMOND, Michigan, Chairman

"CAPITALIZING THE VALUE OF MODELS TO MEET THE DEMANDS OF THE CURRENT TREND IN PRIMARY EDUCATION"

MRS. ALICE CHATFIELD
Ohio

Schools for the blind are old, but the effort to adapt them to the interests and needs of the children and to make them take hold on the life and work of the world in which they now live, is new. We must provide the kind of education that will encourage the children to think for themselves, challenge them to attack problems, analyze, judge and discriminate. The more sincere this effort becomes and the wider and clearer the vision of the purposes and possibilities of education, the keener becomes the search for more effective methods of teaching.

Psychologists and students of pedagogy maintain that children in the lower grades gain experiences most readily through the eye. The younger the child the more easily he learns by seeing and doing: "Seeing is believing" is an old adage in which there is more than a modicum of truth. This is also true with the blind child whose sense of touch rather than sight is ascendant among his faculties.

If his education includes experiences by which intelligence is developed, knowledge acquired and character formed, then the models can be made an invaluable aid to his education by enriching and enlarging his experiences.

The models put a whole new world within the grasp of the blind child during his most impressionable stage. They are able to standardize impressions and make them clear, complete, uniform, lasting and specific. By use of them the abstract can be

made concrete. They bring into the classroom faithful representations of objects which are far too distant, or too small, or too large, or otherwise unsuited for direct classroom examination.

Not all classes can utilize the models in equal amount or with equal benefit. It is appropriate, therefore, at this point to consider the following when preparing to use a model:

1. What are the objectives of the unit?
2. Which models will be most helpful in achieving these purposes?
3. How well do I know this particular model?
4. What supplementary printed materials are available to help me in its use?
5. At what point in the unit should I introduce the model?
6. What do I expect it to accomplish at that point?
7. What activities and projects might be started as an outgrowth?

Criteria for using the models from pupil's standpoint:

1. Do the pupils examine the model for enjoyment, or is there behind this a question for aid in solving their problem?
2. Do the pupils accept the model at face value, or do they make comparisons and weigh values?
3. Do they check text book statements?
4. Does the model fit the work being done by the class?
   a. Are doubtful points explained
   b. Are explanations pertinent?
5. Is follow-up work carefully planned?
   a. Does it summarize what was used and link it with the other class work?

If a model is worth having it is worth following up. The accounts below describe an attempt to combine model study with text and reference work, with the definite aim of stimulating the pupils' interest and of making more real the life, places and things studied. It is in such subjects as geography and nature study that the models are proving valuable.

The First Grade learned that Nature made birds, animals, trees, wild flowers, and a host of other important things. Some of these are not easily accessible for observation and close study, for instance, the butterfly. A lesson about the life of the butterfly developed from the finding of a cocoon on the fallen branch of a tree. The children showed such a keen interest in this study that the model, "Life Cycle of the Butterfly," was brought into the classroom. Thus, the children were able, by means of the model to see what they would probably never have been able to see otherwise.

Many advantages are claimed for the use of the models in the social studies as well. These advantages include games in information, increased interest, stimulation of thought, stimulation of curiosity, changes in attitude and the like. In the Second Grade the use of the model Post Office serves as something to do:

1. Accept the mail.
2. Sort and distribute it.
3. Serves as an incentive for writing better braille in order to send letters and invitations.
4. Something to measure and learn about yards, feet, and inches.
5. Learn songs about the postman.

In the lower primary grades the child is aided in evaluating his early surroundings: his school, nearest store, neighbors, his own back yard and pets. By the end of the Third Grade his environment has extended to include a much larger horizon. He is interested in children of other countries. He wants to know where his food comes from, who makes his clothing, and how do animals at the zoo live in their natural habitats.

In the study of, "Around the World with the Children," used in the Third Grade Social Study Class, the models have proven to be of inestimable value.

At the beginning of the school year the children became interested in the study of Indians following the story of Columbus' discovery of America. So the model of an Indian village was presented; soon all the children were singing, "Moochi Moccasin."

The dressing of two dolls as Indian children led to an interest in Indian children's clothing and homes. The Bark House of the Woods Indians was presented first. Many interesting questions and discussions arose concerning the life of these Indians. Next came the Tepee of the Prairie Indians; then the model of the Pueblo Indians of the Southwest. During the study of these models the children became interested in the home life of the Indians and especially their food. Arrow heads and the models of the canoe and Indian drag helped to illustrate the Indians' method of obtaining and carrying home his food. (One little boy hitched the drag to a toy dog to see how it worked.)

The model of Serpent Mound of Adams County, Ohio was an incentive for increased reading of Indian legends.

Several months later when the children had an opportunity to talk with a real Indian from Arizona, they were able to talk intelligently with him concerning his tribe and to ask many pertinent questions.

In the study of the Pilgrims the models of the Mayflower and the Pioneer village with its log cabin, block house, church and stockade were very valuable.

At Christmas time the study of the desert Children was enlivened by the use of a detailed model of the pyramid, Cheops. An outcome of this study was a play developed, written, and presented in Assembly by the children (of course, with the aid of the teacher). The study of the Desert, coincided with the Bible study, and after seeing the model of the Nativity, the children reproduced the scene in the sand table.

In the study of the lives of Washington and Lincoln, the models of Mount Vernon and Lincoln's cabin illustrated much in the lives of these heroes that words could never convey to little children.

In summarizing the value of models used in Primary education we find that the models function very effectively as an introduction to a new topic which is not within the immediate experience of the child as it stimulates interest in this new field. The models help to develop the powers of observation on the part of the pupils and make them more eager to recreate their own interpretations. The models provide a basis for reading material, develop further the reference habit, aid in spelling and language work, and serve as a basis for arithmetic.

There is a lack of statistical evidence that lessons taught with the aid of models are superior in result to those without, but there is a bright outlook in finding them to be such.

"TYPES OF BRAILLE TO BE USED IN THE LOWER SCHOOLS"

FRANCIS M. ANDREWS
Principal, Perkins

This short paper may seem dogmatic, critical, and perhaps biased. It may cause you to express your opinions and thereby stimulate a discussion. If it does, it has accomplished its purpose, for I was asked to attempt to write something which would do just that.

Why do we teach grade one braille in practically every school for the blind in this country, when in a year or two all pupils will be using grade one and one-half braille? The answers have certainly been varied: Many believed it was simpler and more logical to start that way. Someone said that seeing children had no such method; therefore, why should the blind. A number of teachers insist it makes for better spelling; yet, when asked for scientific proof, they simply reply that they have none.

Personally, I think the grade of braille taught has nothing to do with correct spelling. I know from results obtained in the Stanford Achievement Tests over a period

of five years that the spelling in certain institutions has greatly improved. The reason seems to be obvious, for after the first test it was discovered that pupils were far below average in spelling. The situation was discussed in teachers' meetings and definite steps taken to improve this condition. At the end of five years we found that the average spelling ability of the blind in these particular schools, as shown in the 1939 Stanford Achievement Tests, has been progressively raised in each year, due to the drill in this subject. If a child learns that certain signs stand for definite combinations of letters, I cannot understand why that should make for poor spelling. If one is to spell correctly, one generally needs some form of drill and I believe our blind need more of this drill than most children who have sight.

In the teaching of phonetic grade one and one-half can be of definite help, for we have symbols which have very definite sounds. Many teachers feel that this is a great help in the teaching of phonetics.

How do you teach braille in your school? Do you teach signs or words? What reasons can you give for following your method? Do you do it because you believe it the best; because you cannot find material in grade one and one-half; or because it has always been taught as you teach it?

SECTIONAL MEETING — MATHEMATICS

JUNIOR AND SENIOR HIGH SCHOOLS

TUESDAY AFTERNOON, JUNE 25—2:30 TO 4:30 O'CLOCK

SUPERINTENDENT Y. L. FONTENOT, Chairman, Louisiana

"TIME SAVING METHODS FOR THE BLIND IN MATHEMATICS"

W. E. CHADDERDON
Louisiana State School for the Blind

My suggestions are not in sympathy with "Progressive-Education" or any of the experimental monkeyshines that go with it. I present no theories, units or any of that other streamlined super-intellectual humbuggery. In peace I offer only sound pedagogy and common sense. I had enough of mental aeronautics and nonsense some time ago—I became sick of sitting in a Rolls-Royce stuck in a mud-puddle of non-essentials. As I see mathematics, it is a true science, the only "exact" science; and it is a pleasure to teach a course flavored with strong, noble Christian character which does not smack of play and idleness; a weakness which has been suggestive to those too soft to punish, too lazy to work, too rotten to pray and too politicalized to pay debts; of the accumulation of five million criminals, twenty million able-bodied loafers, five million broken homes, seventy million jazz-minded pagans and a national debt of forty-five billion dollars.

In Braille, the numbers are written by affixing a number sign before the letters a, b, c. d, e, f, g, h, i, and j for digits 1, 2, 3, 4, 5, 6, 7, 8, 9 and 0 respectively. The decimal point is the letter k on the opposite side of the cell. The symbols for square and cube and other characters for exponents are letters, contractions or characters which could be confused with letters. The letter (o) and the contraction (ow) are used in division and for parentheses. Q and the (er) contraction are used in symbols of grouping. It is a reasonable time saving method in algebra to avoid all of these above named characters as algebraic unknowns and use only the letters w, x, y and z, with x being the outstanding algebraic unknown. This saves the necessity of writing a multiplication sign between numbers and letters and avoids confusion. If you will write in Braille 11A5

(eleven times capital a to the fifth power), you will realize my point. It is much easier, quicker and less easily confused if you write 11x5.

In algebra, credit should be given pupils for knowledge of algebraic functions already known from use in the grades. Pupils have used unknowns in the study of proportion. Proportion is an equation. There are coefficients and exponents in proportion. There first we teach the geometric axiom "Equals divided or multiplied by equals give equals!" It is a great timesaver to begin the teaching of algebra at a point in the text where new material is provided. It is unreasonable to spend time duplicating fifth, sixth, seventh and eighth grade problems in algebra just to give the same work a new name. Since eighth grade arithmetic contains equations, I believe we can save time by using the first two chapters of most algebra text books simply for a quick review and not spend serious thought there as we are not presenting anything new. I generally cover the first two chapters in the first week of school.

Algebraic problems involving grouping should be presented **after** "multiplication" has been taught; because, when no coefficient is written, one (1) is understood to be the coefficient, and if no sign is written, (+) is understood. It is a timesaver to present only one rule for one proceedure. When a quantity is enclosed with symbols of grouping, those symbols may be removed by multiplication by the negative one or the positive one which is understood to precede the quantity, thus, no rule for the removal of parenthesis is necessary as such. For example, we have problems of this nature: Remove parentheses and combine—; $(X + Y) - (2X - 2Y) =$ ..... We are provided with a set of rules which state, "To remove parentheses from a quantity preceded by a plus sign, remove and leave all signs the same as they were. To remove parentheses from a quantity preceded by a negative sign, remove and change all signs within the parentheses." Now if each quantity were multiplied by the positive one or the negative one, the parentheses would be removed and the signs would be correct. When a quantity has a coefficient of (2) or more, we need no rule—surely we need no rule for a quantity preceded by a coefficient understood to be one (1).

In teaching any mathematics, avoid cumbersome fractions, multiplications and divisions until the phase of work being taught is completely understood. The mechanics of Braille when continuously concentrated on serious time absorbing problems irritate many ambitious students and actually destroy the love for mathematics which they might otherwise enjoy. Now, about fractions—fractions are nothing more or less than an expression of division and the only timesaving method I have to offer in division deals with long division. I teach my pupils to substitute reduction for long division whenever possible and it is possible whenever the divisor is factorable, even though the dividend is not factorable. For example:

231)487965—reducing by 3, we get 77) 162655 and reducing by 7, we get 11)23236 3/7 or .42857 which is now a short division problem giving an answer of 2112 31/77 or .4026 in the usual manner of short division. The importance of this method is its ease in putting the problem in Braille and its ease in actually working the problem. A few days of work on fractions at an early date in any mathematical course saves a world of time when fractions are encountered in later problems.

An important multiplication discovery is the following method of putting the work onto the paper in Braille. Undoubtedly the hardest part of long multiplication is the mechanics of the Braille. If it is possible to break the problem into short multiplication exactly as I did the long division into short division, that is of major importance. For example, when multiplying by 48, multiply first by 6 and that answer by 8, or first by 12 and that answer by 4. There is less work to be written in Braille and less occasion for error for there is no addition. But if the problem is such that neither the multiplier nor the multiplicand can be factored and the old long type of

multiplication must be employed, there is yet a worthwhile discovery that may be used. I have taught pupils to multiply correctly after they had failed so to do for several years previously by using the following method of arrangement.

Put the problem to be multiplied onto the paper in any convenient form. Start the multiplication, doing the work of writing the several lines to be added onto a scrap paper, or better, onto the same paper reversed so that one may read the Braille as he needs it when he writes. Again reverse the paper to do the adding and the answer will be on the same side of the sheet as the original problem. The important part is in locating the digits to be added. If the pupil will put the first digit (units) of the first line onto the extreme left of his paper as he writes—he will find it easy to locate his second line in the proper place. It has been taught in the grades that one should "jog-over" one space for the second line, two spaces for the third line and so on; this should not be taught for there is no reasoning with it. Every mathematical action has a perfect reason. One of the functions of teaching mathematics is to develop reasoning. Instead of speaking of 'jogging-over,' we should teach, particularly in the lower grades, that the 'tens' digit actually means "tens" place, consequently in multiplying by it a zero should be put into the units place of the second line. This method keeps the second line with the digits properly arranged for addition. When multiplying by the "hundreds" digit, we should put two zeros and by "thousands", three zeros and so on.

Since each line begins in the very end cell and by using the zeros, no time is wasted in putting any work incorrectly onto the paper. Furthermore, a very important carry-over of this method will be of untold help in algebra. Just as we write $X^2 + 2XY + Y^2$ in algebra, so do we write 235 in arithmetic. One realizes that the 2 and the 3 and the 5 of 235 are each terms and cannot be cancelled. Yet, the 235 means 200 + 30 + 5 just as surely as the algebraic number has its meaning, yet it is necessary to separate the algebraic number with plus signs and it is not necessary to separate the arithmetical number. We can prevent any thought of pupils cancelling the X^2 term or the 2XY term or the Y^2 term as terms, if they realize just how numbers are actually built-up.

Example:

234
678
———
1872
16380
140400
———
158652

Relative to cancellation, either in arithmetic or in algebra, all of the numerators should be written first. They may be separated by a times sign whenever necessary or they may be written as factors in parentheses. After all numerators have been written a division sign or fraction slant may be written and then all of the denominators as factors may follow. To do the cancelling, one may press the Braille dots down with his thumb-nail—then a teacher who reads Braille with his eyes can still check the work easily. Even the person who reads with his fingers can, with practice, read the work that has been cancelled if the dots are not rubbed to blank. In working multiplication and division of fractions in algebra, I find this method decidedly a contribution.

Example:

$$\left\{\begin{matrix}2X^2+7X-15\\2X^2-3X-14\end{matrix}\right\}\left\{\begin{matrix}2X^2-19X+42\\8X-12\end{matrix}\right\}$$
$$\left\{\begin{matrix}X^2-X-30\\3X+6\end{matrix}\right\}=$$

I have noticed many fractions written $(\frac{1}{2})X$, $(\frac{1}{4})Y$ or some other fractional coefficient preceding a literal factor. It not only saves time, but saves confusion by writing these same fractions X/2, X/4 or with any fraction, put the numerator and letter together and the denominator alone in it's place and avoid the use of parentheses as would be required to write these

same fractions in Braille. $(X^2-(\frac{1}{2})X+\frac{1}{4})$ may be more easily written $(X^2-X/2+\frac{1}{4})$, and by the Braille student, much more quickly understood.

Of the eight special factoring cases—it is customary to teach these eight special products separately and to spend much time drilling on them. I believe we can combine some of them and thus teach fewer rules and fewer cases, thus saving time and patience.

The eight special products are:

1. $X(Y+Z+....)$
2. $(X+Y)^2$
3. $(X-Y)^2$
4. $(X+Y)\ (X-Y)$
5. $(X+Y)\ (X+Z)$
6. $(AX+Y)\ (BX+Z)$
7. (X^3+Y^3)
8. (X^3-Y^3)

I believe we could combine numbers 2 and 3; also 5 and 6; and also 7 and 8. In fact numbers 2, 3, 4, 5 and 6 could all be taught as the product of two binomials—someday in 2nd. year algebra the pupils could be shown the "short-cuts" during one afternoon. I expect they would learn them by use much the same as boys learn to smoke; and if we combined these special products in this fashion there would be only 3 special cases with their variations instead of 8.

Much time can be saved having a complete outline made of the course of study from the first grade in mathematics through high school and actually used by each teacher to prevent duplication of work.

And now to waste a little time: Sometimes a few mathematical stories or jokes catch a drifting interest.

A man had 17 mules. He decided to give them to his three sons. To one he gave ½ of the lot, to another he gave 1/3; and to the last son he gave 1/9. The boys were puzzled as to how to divide the 17 mules according to their father's wish. Finally, they borrowed a mule from their neighbor—thus making 18 mules in the lot. The oldest son then took his half which was 9; the next so took his third which was 6; and the youngest boy took his ninth which was 2. 9 and 6 and 2 makes the 17. They then returned the mule which they had borrowed from the neighbor.

A couple of boys started into the chicken business. One boy bought 30 chickens @ 3 for $1.00; the other boy bought 30 chickens @ 2 for $1.00. Together they had 60 chickens and had spent $25. Things happened which caused them to change their plans and they had to sell their chickens. They had purchased their chickens at 2 for a dollar and 3 for a dollar, so they sold them at 5 for $2.00. But, there were only 12 groups of 5 and @ $2.00 per group they received only $24.00 and they had paid $25.00. Where did the other dollar go?

Three men and their mother rented an apartment. The men each paid the mother $10 a week to provide for the expenses and she in turn paid all the bills and kept house. One week she did not use all of the $30, she had $5 left over, so she gave each boy back $1 and kept the other $2 herself. Now this made the boys pay $9 each for that week which totaled $27 instead of the usual $30. $27 plus the $2 which the mother kept makes $29. Where did the other dollar go?

"THE USE OF APPARATUS IN TEACHING JUNIOR AND SENIOR HIGH SCHOOL MATHEMATICS IN SCHOOLS FOR THE BLIND TO MAKE THE SUBJECT LESS ABSTRACT"

MRS. RICE WOODWARD
Alabama School for the Blind

I The papers upon the teaching of mathematics read before the last convention, also those that have been published in the Forum or the Outlook for the Blind, I have studied with great interest and almost complete agreement. I shall not discuss the subjects so ably handled in them.

II Replies were received from nearly thirty of the schools to which I sent this questionnaire:
(a) What apparatus do you use in teaching junior and senior high school mathematics.
(b) Which do you consider most valuable?

I sincerely thank those principals and teachers who carefully answered my questions.

III Analysis of replies:
(a) A very few use no apparatus, depending upon mental work. These teach only advanced arithmetic and evidently only computation.

Practically all use drawing instruments, equipment, and materials, also models of plane and solid geometrical figures of great variety. Weights and measures are listed by only a few, probably because these are often taught below high school level. Devices for computation are named by many. The type slate and the Braille writer are found very useful.

Some schools use models and devices manufactured especially for the use of blind persons; others, ordinary "seeing school" instruments which they have adapted, or "home-made" ones, and get excellent results. Many have gathered their own collection of geometrical models from articles in common use, such as boxes and cans of different styles and shapes. Their use of ingenious contrivances, or of familiar objects in new ways, should be made known to teachers in other schools.

The replies show agreement that models and figures give reality, also that all equipment used in schools for sighted should be adapted for use in those for the blind, that geometrical models, and others, must take the place of the drawing and illustrations in the textbooks for the sighted.

Much fine adaptation has been done in this regard. We hope that in time the cost of such devices will be much lowered and will be available to all schools.

Perhaps Mr. Waterhouse will arrange his models of buildings and bridges in "traveling museums", and send them out in circulation to other schools.

(b) Replies to the question, "What apparatus do you consider most valuable?" are grouped in four classes according to the purpose stressed.

1. Those devices and methods "which will be of most use to the pupil in his later life." This generality, which includes the other three, is discussed by another teacher and is only touched upon in this paper.

2. "The apparatus which helps the pupil do original work." This includes tools and equipment discussed in other papers so not enlarged upon here. There is no argument, however, as to the importance of such aids.

3. "The objects the pupils make themselves." Here again there can be no argument. "Learning by doing", and the satisfaction of creation, are the results for which we strive.

4. "The use of familiar objects." This centers the interest of the pupil upon the

form, or the formula, or the volume that is being studied. His attention is not diverted by handling a model new to him. Even where the laboratory is fully equipped with fine models, these should be used for "controls", and familiar objects should be frequently compared with them.

There is danger with sets of measures that the pupil might associate the capacities with the shape or the material of the containers used in the classroom. Many containers of the same volume but different shapes should be collected.

There is the same danger that with geometrical patterns the pupil might associate the name of the figure with the size and material of the model demonstrated. Here objects of different materials and sizes, but of the same shape, should be compared.

The use of school-made tools encourages the pupil to make his own in later life. The use of familiar objects and objects in nature shows the pupil the relation of his learning to his everyday living.

Under this head comes the use of a familiar device made for one purpose but used in quite a different field. For example, the Taylor arithmetic slate is successfully used for graphs, for drawing to scale, and for designs.

Familiar objects, as pasteboard boxes, are excellent teaching devices in many fields. Used as models for rooms, they give better understanding of even so familiar a place as the classroom. These models should be constructed by the pupils. Crude class-made models of any familiar object larger than can be embraced by the arm-sweep are valuable.

Objects that can be destroyed during investigation are very useful.

The use of many other familiar objects is set forth.

IV. Digressions

(a) Drawing-to-scale by the pupils is one of the most informative and enjoyable projects. This work can be done with the simplest and most available apparatus. At first such drawings should be made of buildings or surfaces already very familiar to all the pupils. Such a project involves the use of many different "units" of mathematics. The resulting map of a familiar building is to a blind pupil what a road map is to a tourist! He observes the building as a whole.

(b) Plea for teaching of design to the blind child of junior and senior high school age. He has the tools and the perception. The enjoyment of such projects, the originality displayed, the real love for it, show the need. The knowledge, art, beauty, he can readily grasp. He should not be deprived of the satisfaction of creating beauty, and the appreciation of symmetry it provides.

V. Measurement as the all-embracing mathematics. Do not take for granted that the pupil understands the ruler, the yard-stick, the tape-line. Teach him. Let the pupil estimate first, then verify. Measurements give the pupil much painless instruction. Learning-by-doing measurement is especially valuable in teaching the slow-moving child. Measurement is the master art. "Perfect measurement is perfect truth, and sets man free."

SECTIONAL MEETING — MUSIC

TUESDAY AFTERNOON, JUNE 25—2:30 TO 4:30 O'CLOCK

BASSET W. HOUGH, New York Institute, Chairman

"MUSICAL EDUCATION OF THE BLIND"

BASSETT W. HOUGH
New York Institute for the Education of the Blind, New York City

The Place of Music in the Curriculum

In determining the extent to which the blind should pursue music, it should be recognized at once that music is a very specific kind of study which, for success in anything beyond the elementary stages, demands special aptitude on the part of the student. Music students, blind and sighted, may be divided roughly into two classes: those with a knack or aptitude for music and for the technique of performing, and those without this knack or aptitude. In actual fact this classification is very difficult to determine — at least rigidly. For this reason it is perhaps better to speak of the degree of aptitude and musical talent found in different students rather than to attempt to determine just who are the chosen ones and who are not. The pursuit of music in school, to the extent of group singing, the study of the appreciation of music, and a certain amount of piano study, is legitimate for any student. Beyond this point, however, music becomes a special study for which special qualifications are necessary. Upon this degree of aptitude, therefore, will depend the advisability of more advanced music study.

Furthermore, the process by which the blind learn and memorize music is so cumbersome and time-consuming that it would seem that all except those with talent could use their time in other ways to better advantage. The handicap of blindness thus places the musician at a special disadvantage. Not being able to read music at sight, he must learn and memorize everything he plays, while the proficient sighted musician can play or sing at sight music of moderate difficulty. Also, the blind musician is limited to the comparatively small amount of music available in braille, except in rare cases when he can afford to have additional music transcribed privately or taught him by rote.

Possibilities of Music as a Vocation

It will be easily seen from the foregoing paragraphs that the handicap of blindness is extremely serious to the person contemplating music as a vocation. Therefore it would seem unwise to suggest music as a profession to any blind students except those with unusual talent. The obstacles are obvious: the difficulty of acquiring sufficient repertoire, due to the limited amount of musical literature in braille and the slow methods of memorizing; and the inability to participate in any group singing or playing that requires sight-reading, a capacity which most professional musicians are obliged to make use of constantly.

In the field of teaching, the blind person is also at a serious disadvantage. It is obvious that a blind teacher of an instrument will have difficulty in keeping in close touch with the technical problems of the pupil. Teaching theoretical subjects involving notation to sighted pupils is for the most part impracticable, although it would be possible with blind pupils through the common medium of Braille. Lecture courses in the history and appreciation of music and kindred subjects are possible for blind teachers, although assistance is necessary in finding access to the preparatory reading and musical illustrations that are not available in braille. The blind musician who has very exceptional talent can largely overcome and compensate for some of these difficulties. The field in which the blind teacher of music is likely

to be most successful is in teaching the blind. Here he is intimately familiar with the problems and with the methods and techniques of attacking them.

Naturally, any professional work which involves singing or the solo playing of an instrument may be undertaken by a talented blind musician with the hope of some success. Further vocational possibilities for blind musicians will be discussed under separate headings farther on in this chapter.

Methods and Techniques

Elementary music study. As with the sighted, the beginning stage in musical education is the most important and the most difficult. Blindness unquestionably creates more difficulty at this stage than at any other. By the old method of teaching, a child beginning to study music was set down at a piano and taught the mechanics of the instrument and the artificial symbols of notation, all of which amounted to so much dry information with little or no relation to his previous experience. Modern methods have followed somewhat the theory of Pestalozzi, the Swiss educational reformer, who held that knowledge should be acquired first through experience, proceeding from the known to the unknown. In music education this principle is carried out by having the child first experience the elements of music by singing simple songs and engaging in bodily rhythmic exercises, through which he becomes familiar with the pitch, dynamics, and time-value of tones, and the combination of these elements in music. Then, later, when he is confronted with the symbols and the mechanics of music, they have meaning for him because they stand for things which he has already experienced. At the New York Institute this approach to music is used with beginners by means of the singing of simple songs and of eurythmics, and these will therefore be discussed first among the musical branches taught in this school.

**For a fuller discussion of this subject, see EDUCATION OF THE BLIND, by M. E. Frampton, published in 1940 by the World Book Co., Yonkers, N. Y. to which Mr. Hough contributed the chapter under the above title.*

While practically everyone, even in early childhood, responds instinctively to music, it is by its very nature an intangible art and its study and practice are fraught with many difficulties. The blind child, however, has an excellent opportunity to gain a natural conception of music if he is properly and carefully introduced to it, for he is not subject to the many distractions which meet the eyes of those with sight. From earliest infancy all children are in contact with some form of music, and so before they are introduced to any kind of study it has already become part of their experience and a language with which they are familiar. As a rule the blind child eagerly awaits the opportunity to join in the singing of songs in groups around the piano or out in the open, and he can do so with a degree of concenetration impossible among the sighted. During this impressionable period, when the child's taste is in the formative stage, it is of great importance that only the best material be used—simple melodies and folk tunes, avoiding all that is trivial or showy. During the first two or three years, the child is introduced to the different phases of music study in the following order:

1. Learning simple songs by rote.

2. Listening to rhythms performed at the piano and learning to respond to them with appropriate motions of the limbs and body.

3. Learning to recognize the rising and falling of pitch in melodies and to imitate these by motions of the hands or arms.

4. Connecting pitch as they have experienced it in songs with the conventional letter-names of notes and then with the keyboard, thus gaining some facility in reproducing at the keyboard simple familiar melodies.

5. Connecting rhythm as they have experienced it in songs with note and rest values used in notation and reproducing these at the keyboard.

6. Learning braille notation as a means of representing both the melodies with

which they are already familiar and the keys of the piano.

7. Learning to participate in toy-orchestra groups as a means of becoming conscious of form, phrasing, dynamics and coloring.

Thus it will be seen that the pupil is not introduced to the arbitrary symbols of musical notation until he has first experienced and learned the significance of the thing for which the symbol stands. Similarly, he is not first taught the piano as such, but as a device upon which he can reproduce melodies already familiar to him. It should also be remembered that each of these seven successive steps of learning is not completed and dropped as each subsequent one is taken up, but they are to some extent overlapping and mostly continuous. From the outset the pupils are encouraged to exercise their creative powers in originating melodies. Also an important adjunct to this work is the frequent hearing of good music by means of records or the radio. After the pupil has continued with this kind of musical experience for two or three years, he is then ready for more formal musical instruction, such as piano lessons, singing in chorus groups, further study of braille notation, sight-singing, ear training, and the rudiments of music.

Eurythmics. This subject is comparatively new as an adjunct to teaching music to the blind. It was originated by Emil Jacques-Dalcroze, a Swiss musician, and is based on the concept that music should be first perceived through its most primitive and fundamental element—rhythm. According to him, a pupil should be able to say, "I have experienced" rather than "I know". For the most part the other elements of music can be learned theoretically, but rhythm must be felt, and the best way to feel rhythm is to experience it and actually put it into practice. It is one thing to theorize about four-quarter time and to understand the mathematics of it, but it is another thing to carry it into action and to play a composition with correct rhythmical feeling.

As originally planned by Jacques-Dalcroze, eurythmics was elaborated into a practically independent branch of music study, but as used at the New York Institute it is entirely an accessory in the elementary study of music. However, it has proved itself also to be a great help to the blind in developing muscular coordination, physical poise and grace, in overcoming tenseness and fear, and in developing concentration.

Following are some of the typical exercises used in eurythmics. The children form a circle, holding hands, and on the word "hop" move in the circle, stepping to the rhythm played on the piano. The rhythm or the tempo changes frequently and the children adapt their steps to the changes. Similar exercises are gone through by clapping hands instead of stepping, then clapping hands and stepping at the same time, as well as various other bodily and arm movements, always following the rhythms played on the piano. Then these note-values and rhythms are explained in terms of their proper technical names and symbols; thus the gap is bridged between the experienced musical fact and the symbol which stands for it, and the pupil easily forms the association. This work proceeds from simple things, such as quarter notes and eighth notes, to more complicated things, such as dotted notes, rests, syncopations, accents, legato, forte, piano, phrasing, etc. Continuing this work to further complexities, pupils learn to indicate two and even three different rhythms at the same time. After learning to respond with fixed movements to various rhythms, they are encouraged to supply movements of their own to music played for them. Thus their originality and imagination are stirred.

Occasionally a blind child is encountered who is unable to respond to the rhythms or to produce an appropriate bodly movements. While this may be due partly to his handicap and to the attending inhibitions, in almost every case of this sort the pupil has proved to have only monotone hearing perception and is therefore by na-

ture practically incapable or receiving any musical training. The vast majority of blind children, however, respond naturally to rhythmic training, and since its introduction in this school, over fifteen years ago, it has proved to be of immense value in the early stages of music study.

Musical braille. After a good grounding in elementary music study and eurythmics, the study of musical braille is taken up.

Although the symbols of musical braille are easily read by the fingers, they remain, like staff notation, mere symbols, and the chief problem of the teacher of either system, especially of the braille, is to bridge the gap and make a living connection between the symbols and the musical tones and rhythms for which they stand. Those who learn musical braille for the purpose of teaching it to the blind often feel discouraged at first in this undertaking, as the symbols seem so artificial and remote from music. But if the pupil has previously been through several years' experience in music and has become familiar with the nomenclature of musical terms, these braille symbols will not appear to him as dead artificialities, but will immediately suggest musical tones and rhythms to his inner ear.

A technical discussion of braille notation is not appropriate here, but those desiring to familiarize themselves with this system may refer to **Braille Music Notation**, published by the American Braille Press in Paris.

Voice and chorus. Possibly the most important musical activity for blind students is choral singing and vocal training. The benefits to be derived from these are almost too obvious to require mention. If this work is valuable for the sighted, it is doubly so for the blind, in that it provides for them an emotional outlet and an opportunity for self-expression, thus partly compensating for some of the limitations placed upon them by their handicap. The blind are by force of circumstances cut off from many of the influences which enrich the emotional nature and arouse initiative toward self-expression in the sighted. The privilege of becoming intimately familiar with the folk-songs of various nations and with the great choral and song literature, and of singing this music, goes a long way toward supplying this lack. The words as well as the music of this literature form a great storehouse in which may be found the richest treasures that have come down to us of beauty, sentiment, romance, heroism, patriotism, religious aspiration, and every noble thought and emotion. Contact with such things cannot fail to enrich and ennoble character. Choral singing also provides the best means for developing good diction, good musical taste, a spirit of cooperation, and comradeship.

Individual vocal study naturally benefits the student in all the ways in which choral singing does, but to a still greater degree and with far more opportunity for self-expression. The voice student has the additional advantage of contact with the great art songs of the masters—Schubert, Schumann, Brahms, Strauss—with their rich store of poetry and music.

As regards suitability for the blind, choral study and vocal study obviously rank first among musical subjects, since in these there are practically no obstacles imposed by the handicap beyond the fact that the music must be learned from braille or by rote. The physical benefits of these pursuits should also be remembered. The voice student, especially, develops good posture and learns to breathe correctly, and to control and relax the muscles of the throat, chest, and diaphragm. This is of great value to the blind, for they are inclined to be tense and to find physical repose and relaxation difficult to attain. For these reasons singing is one of the best lines of musical activity for the blind to follow seriously as a vocation, and many blind persons have achieved success in choral and solo singing.

Instrumental Instruction

From the standpoint of the blind, musical instruments may be divided into two groups: those in the manipulation of which the eye plays some part, and those in which

it does not. In playing those instruments which do not employ the eye, the blind may become as proficient as the sighted. With the instruments of the other group, they are of course most successful with those of simple manipulation and in which the hands are not required to move rapidly and accurately over a wide space. Blindness is therefore no handicap in playing the brass or wood-wind instruments, where the hands remain practically stationary, merely the fingers moving. Difficulty is encountered, however, in developing a high degree of proficiency and accuracy on such instruments as the piano, organ, harp, violin, and other stringed instruments. While the blind often develop remarkable facility with these instruments, they rarely approach the virtuosity of sighted performers. Even among those who have specialized intensively, the successful blind piano or organ virtuoso is so rare that he must be considered the exception and not the rule.

Piano. In spite of the fact that a high degree of virtuosity is seldom acquired by the blind pianist, the piano is nevertheless the most practical instrument for those without sight. It is one of the few instruments on which complete music can be played—music which does not have to be accompanied by other instruments, as is the case with brass and wood-wind instruments and stringed instruments of the violin type. The blind pianist also has access to the largest single body of music literature in Braille, while only a very limited amount for other instruments is available in this system. Piano music in Braille includes not only music composed for this instrument, but other music arranged for the piano, accompaniments to songs, etc. It will readily be seen, therefore, that the pianist is the best-equipped and most independent of blind instrumentalists.

From a practical standpoint, also, the blind pianist has an advantage. Besides playing an instrument which, after leaving school, he can pursue more conveniently for his own pleasure, he has also the possibility of contributing to his support by piano teaching on the side. This is being done to a considerable extent by a number of graduates of the New York Institute.

For the student who during his school years shows an aptitude for music, the study of the piano is most valuable, for it is splendid training for the mind and also for developing coordination of mind and muscle. It is also indispensable in the study of theory, harmony, or any other branch of music. The piano has long been recognized as the accepted medium for theoretical music study, and also as necessary for forming a solid foundation for a general musical education, regardless of what instrument one may specialize in. It is accordingly a required subject in all conservatories of music. At the New York Institute, therefore, a certain amount of piano study is required of all music students who show any degree of aptitude. If they do average or better than average work, they are continued as piano students as long as they are in school, unless they show a decided gift or preference for some other musical branch and time does not permit both to be studied. If, after a year or two, however, they show no progress through lack of co-ordination or for any other reason, piano study is dropped from their course and they are continued in appreciation groups and possibly in the study of a simple instrument like the recorder.

Organ. To play the organ well one must possess the aptitude, or knack, spoken of previously. Indeed, this aptitude is even more necessary to organ study than to the piano or the voice, for the organ is a very special type of instrument. One must be able to play the piano well in order to succeed at the organ. A good pianist, however, will not necessarily make a good organist. The organ, with its several keyboards, its pedals, stops and many appliances, presents a variety of problems to the performer. Some students have the natural ability to master the manipulation of this kind of complicated mechanism; others have not. When anyone begins the

study of the organ, the first few weeks or months will usually determine whether or not he has an aptitude for the instrument. The piano and the organ, however, are similar in many respects, and much that has been said in the preceding section concerning piano study applies as well to the organ.

It might be supposed that the blind would have difficulty with this complex instrument, but they do not. They are accustomed to using their sense of touch in finding and remembering things, and once mastered, the organ is easier for them than is the piano. A distinction must be drawn here between the student preparing to become a church organist and the one who is studying for any other purpose. A church organist must have the capacity to improvise and to modulate from key to key, and this requires a natural facility at the keyboard not easily acquired. Although the organ is so well suited to the blind, and many of the blind become excellent organists, difficulties still confront the blind organist who attempts church work, and a regrettably small number of them secure church positions. Some of the reasons for this are clear. The duties of the church organist demand sight-reading, supplying accompaniments on short notice, being ready for the emergencies of the moment, having complete familiarity with an adequate number of voluntaries, anthems, cantatas, and oratorios, and being able to conduct a choir. A blind organist needs a phenomenal memory and ability to do these things. Hence the extremely small number of successful blind church organists.

In all fairness, however, it should be said that there are numerous proficient blind organists who have successfully overcome most of these obstacles, and many church music committees are unduly reluctant to appoint them to positions where they could doubtless give far better satisfaction than sighted organists of less ability. Among the successful organists of this type might be mentioned Alfred Hollins, the Scotch organist of Edinburgh, who has held a fine church position for over forty years, who has given recitals all over the world, and whose compositions are widely known. Wolstenholme, scarcely less eminent, held a similar position in London. Louise Vierne, long famous as the organist of Notre Dame, Paris, though not born blind, was without sight during the latter half of his great career. In this country, David Wood of Philadelphia held a position of importance and was a fine composer.

On the other hand, the blind concert organist is at practically no disadvantage and can compete successfully with the sighted, though the opportunities for remunerative return in this field are few.

For the blind musician who has no professional aspirations, the study of the organ is a source of pleasure and is beneficial in broadening his musical outlook and capacity for appreciation.

Orchestral Instruments and Groups

In a school such as the New York Institute, with a full schedule of work leading to a high school diploma, there is a rather limited amount of time available for the student to devote to musical subjects—even for those who are especially talented and who work toward the so-called music diploma. They are expected to study the piano and harmony and to sing in the chorus. This absorbs three or four periods a day and leaves hardly enough time to pursue the study of any other instrument. However, after the musical foundation is well laid, a student who indicates a particular desire or aptitude for an orchestral instrument is given an opportunity to show what he can do with it. If he shows promise he is permitted to specialize somewhat in this instrument.

Stringed Instruments. The most difficult instruments are those of the violin type, and it is very rarely that students can succeed with these with the small amount of time that can be allotted to them in a school for the blind. With these instruments, the left hand must move rapidly and accurately over a considerable space on the finger-board, while the right hand must hold and move the bow in a

very exact way. In this the eye is a great help to the sighted student, and so the blind are at a distinct disadvantage.

A good part of a violin lesson for a sighted pupil consists in playing by the teacher to permit the pupil to see how things should be done. This is obviously of little or no use to the blind. Considering all these obstacles, therefore, it would seem unwise to attempt to teach the violin on a large scale in a school for the blind, especially to boys. Only those students who show a decided aptitude for the instrument should continue beyond a thorough trial; others will always play with a poor tone or out of tune, which makes these instruments entirely unacceptable. It is not so with the piano, which at least cannot be played out of tune and is not unpleasant even when poorly played.

While playing in orchestral groups is a very desirable activity for young music students under certain circumstances, it would seem unprofitable to attempt an orchestra that includes stringed instruments in a school where there is not sufficient time to develop acceptable proficiency in these instruments.

Wind and percussion instruments. Other orchestral instruments such as the trumpet, trombone, flute, clarinet, saxophone, and drums may be undertaken by the blind more successfully, especially by boys. These are simpler in their manipulation and more easily mastered by the blind. They are for the most part simpler than the piano, as the hands and fingers are not required to move rapidly over a wide space and only one note is played at a time. As these instruments are played mostly in groups, the difficulty for the blind is not so much in perfecting the technique of the instrument as in memorizing sufficient music and in fulfilling the requirements of orchestral routine and practice which is almost impossible without sight reading. For these reasons, participation by the blind in a symphony orchestra is practically impossible. However, the blind have successfully taken part in theater and dance orchestras, and it is in such groups that they find their best vocational possibilities today. There are difficulties to be overcome, however, as practically no music for these instruments is available in braille. But for groups with not too large a repertoire, the blind can have their parts transcribed into braille privately. Small dance orchestras made up entirely of blind players have had considerable success. This is more practicable, as they all work under the same conditions and restrictions.

During their last two or three years in school, students can gain considerable facility in the technique of these instruments and can have some experience in ensemble playing. After leaving school, if they decide to go into this work vocationally they can organize into groups and spend as much time as they need in memorizing and perfecting their repertoire. Blind students themselves sometimes have the mistaken idea that if they fail in the study of the piano, harmony, and other serious music branches, they can turn with more success to dance orchestra instruments and popular music; but such is not the case. To play well in dance orchestras requires solid musical foundation, and dance-orchestra leaders today demand that their players be thoroughly trained musicians.

Harmony. The study of harmony is even more important for the blind than for the sighted, as it is necessary for a complete understanding of musical braille. It is a necessary subject in any well-rounded music course. Several good harmony textbooks are available in braille and the subject can be conveniently taught to the blind, though the mechanics of this process are different from those used with the sighted. While much of the instruction is done by means of the braille text, a good deal more is done on the keyboard than is the case with sighted pupils. Also the blind work out many harmony exercises mentally, which is extremely beneficial, as it develops fine concentration and brings into use their inner ear.

As taught at the New York Institute, harmony is a part of a larger course known as "Comprehensive Music", which

is laid out by the New York State Board of Regents and is granted credit under their system of examinations. Besides harmony this course includes ear-training, melody-writing, musical theory, and some practice in setting words to music, and it occupies two or three years' study following a thorough grounding in the rudiments of music.

History and Appreciation of Music. These subjects find the same place in a curriculum for the blind as in any course in music, except that they are even more important, for among the blind the opportunities for attending concert and opera are more limited than among the sighted.

The methods of presenting these subjects are scarcely different in a school for the blind from what they are elsewhere. In music history a textbook, available in braille, is followed together with additional assigned readings. Ample illustrations are given at the piano and with phonograph records, and these are of great importance to the blind, as they are necessarily less familiar with music which is not often played than are the sighted.

The radio, too, is a great help in the study of both history and appreciation, and it is a valuable adjunct to the illustrations given in class. The teacher can keep informed in the matter of good musical broadcasts and suggest programs to the class.

In a school for the blind, appreciation classes for various groups of different ages are most beneficial, especially for those who are for any reason unable to make progress in other music subjects.

Summary

It may be thought that the foregoing discussion is unduly pessimistic and that it overemphasizes the limitations of the blind in music rather than their capacities, but such has not been the intention. The purpose has been to give a brief but comprehensive survey and discussion of a curriculum of music for the blind, to suggest what lines of musical endeavor, in the opinion of those collaborating in this work, can be undertaken most successfully by the blind, and to indicate frankly the obstacles which prevent their progress in other lines or beyond a certain point. But let it be said here that of all the subjects which the blind may study, music ranks very near the top—if not actually at the top—in importance and inspiration for both pupil and teacher. For its value in mental training, for its refining influence and character building, for its value in developing in the student the capacity to perform or appreciate music, all which things become his priceless possessions throughout life, music would seem to stand alone.

"RECORDING MACHINES AS AN AID IN TEACHING MUSIC"

ELIZABETH L. STOLTZ
Ohio State School for the Blind

If Burns had written, "Oh, would some power the giftie gie us, to hear ourselves as others hear us," he would have echoed the desire of unnumbered teachers of music and all the auditory arts. However varied the channels of sound expression—vocal or instrumental—there is in the final analysis only one channel of sound impression—the ear. It is the ear alone which must be the final judge as to the perfection of those elements of tone quality, intonation, diction and phrasing which, together with many other factors, make the performance of a musical composition an artistic accomplishment.

Discussion of the factors mentioned above is valuable in the teaching of music. Demonstration by the teacher is also helpful in leading the student of music to recognize those qualities which will make his performance more expressive and more artistic. But beyond this, a recording of a student's own performance presents concrete evidence of his perfections or imperfections and makes possible his getting

sufficiently away from the problem to take intelligent part in constructive criticism of his own work.

I believe that we will all agree that no lasting improvement in individuals along any line, be it intellectual, moral, spiritual, or musical, can be truly permanent unless the change emanates from within the individual. If the metamorphosis does not come from an inward compulsion, the result is merely a veneer which will fall off upon the slightest provocation.

At the Ohio State School for the Blind, we have found that through hearing their own performances by means of the recording machine, our students have become better able to evaluate their own work, and to form a basis for independent judgment. This also provides the best possible incentive for improvement, because the desire comes from the student himself, and not from the teacher. We have found the machine to be a good-natured, encouraging, almost human device, which seems to smile and beckon to the student with optimistic entreaty, "Come, try again. I am sure it will sound much better next time".

We have had our recording machine for a year now, but still feel that we have much to learn about its effective operation. To those of you who may raise the question as to whether or not a recording always presents a true picture of the original performance, I can only say that recordings are not always as faithful in their reproduction of the original performance as we should like them to be, and it does take a long time to learn to make really good recordings. But though still imperfect, they have already proved an invaluable aid in music instruction by providing the most effective means yet available of giving to the student the opportunity of hearing his own work, and of deciding wherein it can be improved. We are aware that the effectiveness of recordings as a teaching aid will be markedly increased by improved facility in operating the recording machine.

We have found it effective to make recordings of a pupil's work at various times during the school year, and then to compare them from time to time in order to note improvement along the lines desired. For example, if a personal illustration may be accepted here: I have a violin student whose most flagrant weakness is a scratchy, unpleasant tone. We listened to records made by such artists as Kreisler, Heifetz, Elman and others, and I demonstrated through my playing just what constituted a smooth, legato tone. In spite of these teaching devices, it became apparent that the student was not hearing himself as others heard him. So at the beginning of school last September, I made a recording of his playing. We dated the record, filed it, and from time to time used it as a basis for criticism. Later we made another recording. The improvement in his tone quality was quite noticeable.

It is unnecessary to cite further instances of cases in which the use of the recording machine has proved to be a very effective aid in the teaching of music. This work is still somewhat in the pioneer stage. At our school it has represented quite a challenge to our spirit of adventure. We hope to improve our technique of operation, and to develop still further the potentialities of this system, even in fields so far entirely unexplored.

Elizabeth L. Stoltz
Ohio State School for the Blind
Columbus, Ohio.

SECTIONAL MEETING — PIANO TUNING

TUESDAY AFTERNOON, JUNE 25—2:30 TO 4:30 O'CLOCK

HOBART STEPHENSON, Illinois, Chairman

"EDUCATIONAL VALUES OF A COURSE IN PIANO TUNING"

GEORGE N. RICE
Ohio State School for the Blind

The subject matter of this paper was not chosen because the writer believes it to be of prime importance to the discussion at hand, nor is there any intended presumption that the concepts herein expressed are new to experienced teachers of piano tuning. It was selected advisedly: First, because it is felt that this phase of evaluation has been underemphasized; and secondly, because the most important aspect, "employment possibilities", is to be discussed in a following paper.

A consideration of this topic is indeed timely since, as Mr. Fries points out in his article in the "Teacher's Forum" (May, 1940), apathy regarding the importance of this course has grown to such a degree that it has actually been dropped from the curricula of certain schools for the blind. Let us hope that the courses being substituted will offer equal or better vocational and educational advantages, and adequately compensate for the good will regarding the capability of blind piano tuners which has been created during the span of a century.

With the object of obtaining maximum results in our tuning department, we are endeavoring to make the course both interesting and educational as well as vocational in scope. We are also working toward a correlation of the various aspects of our educational program through practical application to specific problems.

Piano tuning offers particularly favorable opportunities for such a plan since its scope is broader, and involves more of a variety of essential techniques than perhaps any other vocational course commonly taught in schools for the blind.

It is well to point out here, the latter statement being true, a corresponding combination of skills and aptitudes is necessary for the successful pursuance of this profession, viz., mechanical aptitude, an ear for music, originality in meeting and coping with new situations, salesmanship and business sense, socially acceptable appearance and personality, and the ability to get around well without too much assistance. In view of these prerequisites, then, we should not become discouraged if the number of certificates we are justified in awarding appears relatively small.

Some of the phases of practical usage of principles learned in other courses which we are employing are:

Mathematics: as it applies to accoustics, sound velocity, beats, pitch, and harmonics. We give tests which include problems involving these factors.

General science: a field which offers numerous opportunities in this connection. To mention but a few of the principles which may be utilized for enlivening interest: the study of vibrations, the means whereby sound is conducted, the law governing the vibration rates of strings, the qualities of different woods and materials used in piano construction, etc.

The fundamentals of harmony and music are likewise given a deeper significance through the use of intervals and chords in tuning. This is especially true for those entering the department with but a previously elementary introduction to music. In schools where music is not regarded as prerequisite to a course in piano tuning, this department affords for some their sole knowledge of music.

As previously stated, salesmanship and business techniques are definite assets to

the successful tuner, and the teacher of piano service should not fail to impress this fact upon his students. Here again is an opportunity for correlation of phases of training which will prove of value whether the student becomes a tuner, or chooses some other form of occupation.

In keeping with our plan of linking general education with vocational training, we have adopted certain classroom methods such as discussion groups, both written and oral tests, and reference assignments. We do not attempt to refute the argument that "you can't learn to tune out of a book" for it is fully realized that any skill or technique must be acquired through diligent practice; and we are, accordingly, trying to maintain a proper balance between theory and practice such as is done in the study of the sciences, professions, and the more progressive vocational courses. Not only does this plan serve to encourage thinking and good study habits but can, if conscientiously supervised, help to correct a tendency in some pupils to regard proper grammar, spelling, and writing as merely phases of the English course which may be ignored beyond the pale of that class. With this purpose in view, we have occasional spelling matches; the lists of words being selected from errors found in test papers, with emphasis stressed on the special terminology of the course.

Turning now to a consideration of hand training, we are certain that those familiar with educational and employment problems affecting the blind are agreed that this phase is of vital importance. Compared with the advantages of this course as listed above, it ranks second only to the vocational phase. That the lack of manual aptitude is more prevalent among the blind than the sighted is still a moot question so far as the writer's information is concerned. Nevertheless, a few figures compiled as a result of a study of our class records may serve to lend greater emphasis to the need for this type of training.

During my two years of teaching in the tuning department, Ohio State School for the Blind, 34 students received instruction. Degrees of visual acuity among them ranged from the totally blind to those with enough sight to read clear-type. With a view to arriving at a comparison of manual aptitude of those without sufficient sight to be of use with those having a fair degree of useful vision, these 34 were divided into A and B groupings. The 17 placed in the A group were those ranging from average to very good in their records of hand work. Conversely, those in the B group ranged from average to very poor. In the A group, seven were blind and ten had useful vision. In the B group, twelve were blind, while five had useful vision. These findings thus indicate a positive correlation of visual acuity with manual aptitude.

We are not offering these figures as conclusive proof, for they comprise too small a sampling to be regarded as scientifically important. Moreover, no account was taken of ages nor of disabilities other than blindness. A study such as this involves too many ramifications for as meager a treatment as is given here. Such a study might reveal some enlightening data. It might serve to prove or disprove the popular belief that manual skill is developed as a compensation for the loss of vision. It might also aid in clarifying ideas regarding the influence of hereditary factors and early environment as they relate to this matter. For the present, however, we shall leave such deliberations to the realm of psychology, and return to our original thesis.

Regardless of the causes affecting individual differences in manual aptitude, the fact remains that educators and placement agencies concerned with the blind are agreed that the greater majority will be obliged to earn their livelihoods by the use of their hands. It naturally follows that our schools should strive to meet this need through particular emphasis on hand training.

We repeat that the well equipped tuning shop affords especially favorable conditions for such training due to its wide assortment of tools and materials, and the corresponding variety of operations involved

in the course. To mention a few of these operations which have both direct and carry-over value, there are the uses of various types and sizes of screw drivers and pliers, the saw, hammer, square, file, knife, sandpaper, glues, lubricants. etc. Even the more specialized operations such as key leveling and center pin work provide excellent mediums for practice in manual coordination. Time does not permit further elaboration, but any teacher familiar with the subject could supply the details, and thus appreciate its potentialities for originality in instruction.

In conclusion, it is hoped that this discourse emphasizes with sufficient clarity the educational values which might accrue from a well organized, properly oriented course in piano tuning.

"EMPLOYMENT POSSIBILITIES FOR BLIND PIANO TUNERS"

H. G. STEPHENSON
Illinois School for the Blind

Employment for piano tuners means selling piano service and selling piano service is not very different from selling any other commodity. Any alert distributor seeking a market will make a survey of the market possibilities. In our search for a market for piano tuning, we should do the same.

With the completion of readjustment after the Civil War, the production of pianos in America rose rapidly until about the year 1908, after which time it levelled off at slightly less than 400,000 per year. In 1924, the last big year in the piano industry, we produced about 350,000 instruments, approximately half of them being players. In other words, we produced about 175,000 pianos for use as such; for the player piano was a contraption that should be replaced by radios, phonographs or anything else that furnishes better entertainment with much less effort.

By 1932 piano production dropped to the astoundingly low figure of 27,000. From this low point, the manufacturer of pianos has again risen until we have now approximately reached the 175,000 actual instruments produced in 1924. It is probable that in the near future we must content ourselves with a production of 200,000. The industry has been very, very sick but it is not only well past the crisis, but shows every sign of being as strong and healthy as ever. In America the piano is still the very foundation of music, and to civilized man music seems well nigh as important as food, clothing or shelter.

During the rapid development of the piano industry, naturally most attention was given to production and sales. If more attention had been given to service, the business might be healthier today. Late as the hour may be, we must give it serious attention.

If we consider an annual production of 200,000 pianos and base our figures on prices and conditions prevailing generally in the industry, we find that about $2 or slightly more is spent for tuning on each piano in the process of manufacture and about a like amount for tuning in stores or warehouses before the instrument is sold. According to the best estimates, there are twelve million pianos now in use in America and approximately $2 per piano per annum is being spent for upkeep. Thus we obtain the following figures:

For factory tuning, $400,000; Warehouse tuning, $400,000; and for private tuning $24,000,000.

It might be possible to raise each of the first two figures to a half million; but through proper advertising and education the $24,000,000 figure should be raised to $60,000,000. When we neglected private tuning for factory tuning, we dropped a nice big piece of meat to jump for a shadow. In the past factory tuning has meant a livelihood for many blind tuners and we should, by no means, abandon it. How-

ever, the great field in which we have not scratched the surface, is private tuning.

Why have we failed so badly in this great field? First, we are in a highly technical and highly specialized age, an age of rapid change and development. We must be ever alert to keep abreast of the times. We must constantly improve our equipment and methods of instruction. Too, this is the age of the automobile, and in private tuning transportation is an important factor. Many of our blind live on the wrong side of the tracks and do not have the social and economic standing which is important to a successful tuner. Blindness, together with life in a state school, make many of our blind timid and retiring. Furthermore, parents require little of them at home and everything is done for them at school. Lack of energy, and a year after graduation of little or no success, brings on a state of demoralization. Besides all this, a great many people, both blind and sighted, cannot work without a boss. Great as are these handicaps mentioned, the one that towers above all else is pure, unadulterated laziness. Nothing worth while can be accomplished without tremendous effort. The market is there. It is up to us to get it. How? Watch how an insurance agent gets his business. How does an automobile salesman sell cars? Just let one of them think you are remotely considering buying a car and see him get you out of bed early or keep you up late at night. Let an ice box salesman find out you do not have electric refrigeration; then see him go to work. The worst kind of effort will bring some results. The methods of the scissors grinder or umbrella man will bring some returns. Any tuner who really has tried it will tell you that if you ring enough doorbells you will get some pianos to tune. If you ask enough people you will find someone in need of a tuner. Then, how much more will be accomplished with the best soliciting methods. If you find a man who has really worked hard for even eight hours a day for a year or more you will find a successful man and a happy man.

This is an open market. It is a big field and no fences around it, but we must crop the grass. If blind tuners get only a percentage of this big market, the next paper before this group will be on "How To Train More Piano Tuners".

How to do it? By work. The price of success is effort. Can we look at twenty-four to sixty million dollars and cry?

SECTIONAL MEETING

SUPERINTENDENTS, PRINCIPALS, AND SUPERVISORS

TUESDAY AFTERNOON, JUNE 25—2:30 TO 4:30 O'CLOCK

C. S. SETTLES, Superintendent, Florida, Chairman

"A RESTATEMENT OF THE JUSTIFICATION OF LARGE EXPENDITURES ON THE EDUCATION OF THE BLIND IN THE LIGHT OF THEIR SOCIAL AND ECONOMIC DESTINY"

ALBERT G. COWGILL
Principal Overbrook, Pennsylvania

When I read this long title assignment from that dictator, Chairman Scarberry of the Program Committee, my first reaction was the same as yours and that of many of our Staff—"Why that is an essay in itself"!

A special inquiry to our faithful and efficient librarian of the American Foundation, Miss Helga Lende, for the first and original statement of this "justification

of large expenditures" brought the answer that she, the librarian, could find no record of such a statement ever being enunciated, or inflicted upon a long suffering Convention or even those of a round table.

It seems to me that the topic raises a question which is in no sense debatable. There is no need for justifying expenditures for the education of the blind any more than there is need of justifying such expenditures on the education of the seeing. Education is not only the right of every child but is the only safeguard which a democracy can set up to insure its continuance. An uneducated public could not for any length of time maintain a democracy. The blind citizen is as important to this democracy as any other citizen.

Certain implications in the topic should be rejected as entirely unwarranted. Expenditures for the education of the blind vary a great deal and are far from being uniformly large. The White House Conference Report gives the following picture of the costs:

"A handful of schools have sufficient financial sources to provide amply for the physical well being of all their pupils; the greater number, however, are so limited financially that it is difficult for them to do more than preserve the status quo. This applies not only to the maintenance of the physical plant, but also to the replacement of educational apparatus, the employment of teachers, the provision of medical care, and other important items. Both the lowest figure, $285 for each pupil, and the highest, $1,575, are based on attendance. The average cost is $628 and the median $583. The highest costs are for schools located in metropolitan areas in which living costs are high".

After describing the special needs and expensive equipment of the schools for the blind, the Report comes to the conclusion that ". . . . schools with a per capita cost below $600 cannot give their pupils the well rounded training they should have". Thus, rather than having over-large expenditures on education, there are many schools which fall below the minimum. Furthermore, a very substantial portion of such expenditures represent the cost of boarding and lodging children in residential schools. This cost is incurred because that method of education has been found to be most expedient and, in the opinion of many people, most effective. This extra cost, imposed on the state for the education of the blind, is reflected in reduced costs to parents and guardians during the periods when their children or wards are absent from home.

The pertinent point in a discussion of this cost, is not how can we justify expenditures but how can we improve the social and economic opportunities for the blind and how can we educate the public to realize that the blind do make or can make important social and economic contributions! The schools CAN play a leading role in seeing that this is done.

We can improve the social outlook of our pupils by carrying out or enlarging their programs in the following fields: parent education, cooperation with organizations for the care of the pre-school child, emphasis on Kindergarten training and an adequate primary school staff so that blindisms and other bad habits can be checked when they first appear. Older children should have as many contacts with seeing boys and girls as possible and residential schools must not neglect participation in community affairs which is an important part of social training. The high incidence of speech defects among the blind requires an active program of clinical or corrective speech as well as courses in dramatics. A more important place should be given to extra-curricular activities which should be student controlled, the faculty acting in an advisory capacity only. This would go a long way in developing initiative and independence, which are so often lacking in blind children.

The problem of the mentally retarded blind comes up in any school social program, principally because of their increasing numbers in the residential schools. How far should these pupils be included or excluded, how far should they be segre-

gated or allowed to mix with the rest of the student body? The Overbrook School has been fairly successful in establishing a satisfactory solution. All the members of the Special class are educated on a strictly individual basis, the result being that each has an individual program, some subjects and courses of which are taken with the regular students and others are taken as a segregated group, according to the ability of each pupil in each particular subject. Special talents, interests and defects are taken into consideration, so that often the programs are of a mixed character. For example, one boy takes advanced woodwork, advanced basketry, intermediate work in caneing, third grade arithmetic, fifth grade spelling and reading, fourth grade geography, etc. Members of this group are allowed to take part freely in any extra-curricular activities and to mingle with the other pupils of the school and of their cottages. They are never excluded from any school activities and are often the most reliable members of school committees. For the most part, these boys are socially acceptable and when they leave school may be depended upon not to lower the status of the blind in general.

It is clearly our responsibility as school men and women to take the initiative in establishing contact with the parents—not in the spirit of "You do your job and I'll do mine" but of "Let's work together". Organized parent-teacher groups have made notable progress in reaching a basis of genuine cooperation. But our experience has been that those parents with whom the school finds it most difficult to establish rapport, are the very ones who do not attend these meetings- Progress in individual guidance through teamwork between school and home calls for systematic effort on the part of each principal and teacher to cement personal relations of understanding and mutual respect with at least one parent of each child soon after he enters school and through the years, to develop an increasing mutual confidence which will help him get the most out of his school.

Our schools can improve the economic outlook of the blind by establishing a real, functioning vocational guidance program and by securing a full time placement officer.

Some of us were criticized at the Raleigh Convention in 1936 for not having a better planned and better operated guidance program—rightly so—it woke us up—we were too complacent. Since the school years of 1936-37 we have been functioning as follows:

There are now three guidance committees: one for the girls' school and one for the boys' school and a central correlating committee. Beginning in the Junior High School, the results of various testings are examined, the students' backgrounds studied, individual defects or unusual capacities taken into account and a choice of two or three occupations made. Then every effort is put forth to prepare the students to meet the requirements of these occupations by the mapping out of a suitable educational and social program. The Principal, Teachers and certain selected members of the staff visit the home community of the student, meet with the parents, the local pastor, the leader of civic groups, and try to prepare the ground for the student's home-coming. Effective pressure is brought to bear on any agency for the blind as well as any other social agency, to the end that graduates of our schools may have ample opportunity to apply their education in the fight for economic independence. When is all this visiting done? Many holidays were utilized in this way during the past year and, in most instances, at the suggestion of the interested and unselfish teacher.

We are glad to report that the forces just mentioned will be augmented and cemented together in every way possible by the assistance and guidance of a full time Placement Officer, whose work will start in September.

To summarize: An adequate program is one which has a guidance counselor who knows what types of jobs are open, just where the jobs are, how the pupils can be trained for them, and which pupils will

be most successful at them. This means that the school curriculum must be adaptable to changes and the staff must be equally adaptable and resourceful. It means that the school must have a prevocational program and a program of efficient educational guidance. It means that schools must be prepared to extend the curriculum and possibly face increased expenditures for teachers and equipment. This is a large and expensive program and one that is very demanding of time and energy on the part of the administrators and the entire staff, but it is the only type of program that will show results.

So we see that our changing concepts of the functions of the school and our recognition of present deficiencies lead to the road of increasing expenditures, which will be sufficiently repaid in the increasing social and economic functions of our blind citizens. The need for the education of the public to see that fact is another pressing duty of the schools. Early workers in this field have shown the public that the blind are educable, we in the field today must show the public that the blind are also employable. As long as the public is unconvinced we shall have to verbalize justifications; as soon as the public is convinced, justification will be self-evident.

"THE USE OF THE RADIO IN SCHOOLS FOR THE BLIND"

ROBERT BARNHART
Perkins-Harvard Class, 1940

We may very well begin by accepting radio as a fact of life: radio as it is with its good, bad, and indifferent programs; with its high-pressure and its restrained advertising; and even with its irritating brief electrical transcriptions. This thing we call radio touches the lives of almost every man, woman, and child in this country. It provides intellectual and cultural stimulation in good measure for those who will listen. It furnishes laughs for millions through programs directed to a mental age level most of us would expect to find in the elementary grades. Through endless repetition of convincing catchphrases, which really mean nothing if analyzed, radio determines the buying habits of more of us than would be willing to admit it. Certainly radio as we know it today, through forty-five million receiving sets, is a tremendous force in our lives and is potentially an even greater force.

Any force of this magnitude and with the potentialities both positive and negative possessed by radio claims the serious and thoughtful consideration of all educators as well as those interested in the education of the blind. The residential schools for the blind are educating thousands of pupils who do and will depend upon their ears for much of the stimulation which the seeing may get through their eyes. There is probably no easier, pleasanter, or more satisfying way to get this auditory stimulation than to turn the dial of a radio. Where the dial may stop determines what will come through the speaker, and the tastes or level of appreciation of the individual or the group, listening, largely determines where the dial will stop.

Tastes and levels of appreciation in listening like tastes and appreciations in literature and music are acquired. Since the residential school is the pupil's home for nine or ten months of the year, it has a large responsibility in helping that pupil build an appreciation of the best in radio and a capacity for critical evaluation of the programs he hears. There are many ways in which this help can be given. Millions of pupils in the public schools and many in schools for the blind are finding a new meaning in subject matter and are at the same time learning that radio can do more than simply make them laugh and cause them to have nightmares. Programs such as Columbia's American School of the Air, the National Broadcasting Company's Gallant American Women, Adventures in Reading, Music appreciation Hour,

and other good programs directed to schools are giving greater reality to cold textbook materials and are bridging the gap between the school and the world outside. Many teachers and school administrators believe that programs such as these do much to establish desirable listening habits which may function long after formal education has ended. There is good reason to believe that tastes and appreciation in radio programs, as well as listening habits (how intelligently one listens after he has chosen a program), are fixed by the time most pupils leave school. Even if this is only partially true, the residential school has a large task to do.

With careful selection of programs, adequate preparation for them, and discussion or interpretation following the listening, radio offers much to aid in the achieving of the more immediate aims of the school and classroom. Even the best radio programs, however, whether directed to pupils or to the general listeners, do not teach any more than does a textbook alone; they serve as additional stimulation and provide new subject matter which often possesses greater reality than the textbook. Yet the pupil needs the teacher's guidance and help in relating these new experiences to his other experiences quite as much as in any other phase of education. If the adult learns from listening, he does so because he has developed the capacity to think independently. The pupil now in school can develop this capacity using the medium and content similar to that he will have when he leaves school.

In the uses of radio the residential schools have one opportunity which the public schools do not have. Guidance and supervision of listening outside the classroom is possible to a much greater degree. This does not mean, however, that every minute of every pupil's listening should be rigidly guided or supervised. It means rather that the listening of many pupils may be skillfully turned into more worthwhile channels. Programs related to points of high interest value in class work may be suggested or assigned by the teacher as outside listening. The scout master may listen with his or her group to some of the broadcasts during Boy Scout or Girl Scout Week. Any club sponsor might act as leader for his group in listening to good public affairs, musical, or other broadcasts, and any teacher may very well meet with her class occasionally as an evening listening group for programs of special interest to the class. These are some of the more casual and informal ways in which pupils may be introduced to the better things in radio outside class time.

Any attempt, such as these, to influence the listening of the pupils can succeed only in as far as the teacher or supervisor is an enthusiastic leader, not a sergeant at arms or presiding officer. Programs suitable for such listening are seldom found for pupils below the junior high school grades; but gradually better programs are replacing the hair-raising thrillers that have been the radio diet of most grade-school children during the past few years.

Radio can not be successfully brought into the classroom nor guidance and supervision established outside the classroom overnight. As those already using radio know, most of the problems raised by other class work plus those peculiar to listening beset the teacher. There is much more to the successful use of radio in the classroom than having a good radio properly tuned in at the beginning of a broadcast though these are important details. The pupils need to know something in advance about the broadcast, and an opportunity should be provided for questions and discussion either immediately after the broadcast is heard or as soon as the subject matter can be related to the work of the class. Fortunately broadcasters are providing increasingly adequate advance information on programs and are scheduling them long in advance. This makes it possible for the teacher to choose in advance the programs that are to be heard and to prepare for them as well as to make any adjustments necessary in the class schedule to make the broadcast available.

In both classroom and outside listening individual differences will appear just as in other activities. Not all pupils will de-

velop the hoped for tastes, appreciations, and critical judgment; some pupils may profit little from listening to good programs just as some gain little from reading good literature. It takes as much ingenuity to make sure that all get as much as possible from listening as it does to make sure that all learn to read as well as possible. To offset this, some pupils will become leaders in listening groups; these are the ones who can join adult listening groups with the seeing after they leave school. The adult listening group is a movement which is spreading rapidly in this country. Not only will such participation for those who are able and prepared for it mean wider social opportunities and greater possibilities for civic service but also the opportunity to continue their education after school. Even those who show less promise may gain much in stimulation which they might otherwise miss without supervised and guided listening.

As pupils become more experienced in listening they will show more interest in discussion, and their discussion will be pitched at a higher level. They will gradually become able to assume more leadership in their own listening groups. In some cases the adult leader may retire into the background and remain only as an observer. But this will not come about in a short time. It may be one, two, three years or even longer before some of these improvements become apparent. Some of them may never appear to the degree pictured here; but considerably lesser improvements would be well worth the effort.

There are some negative possibilities, however, which should be taken into account. That radio can and does encroach upon time which formerly was spent in reading for pleasure; that it keeps some pupils indoors when they should be out; that it furnishes an easy escape for others —are true either in fact or potentially. The same, however, is or has been true of other innovations which have invaded our schools. What the pupils might be reading and what they are listening to are important considerations. The programs they listen to may be as good as or better than what they would voluntarily read. The radio can and often does serve as an incentive to reading.

This whole problem of radio in relation to other activities is essentially a question of balance. Not all good broadcasts can be listened to; the best ones will have to be carefully selected. The radio may have to be denied to some few pupils and in some cases restricted for all. Wise and thoughtful regulation has been necessary in almost every activity within the walls of the residential school. If the necessary regulation of radio can be developed through co-operation with the pupils and with a high degree of self-administration so much the better. In any case the educational values of the radio should not be sacrificed to ill-conceived or ironclad regulations.

"THE ROLE OF THE VISITING TEACHER IN THE SOCIAL AND EDUCATIONAL ADJUSTMENT OF THE DAY-SCHOOL BRAILLE-CLASS CHILD"

HARRIET E. TOTMAN
Visiting Teacher in Charge of Braille Classes, Cleveland, Ohio

Thirty-one years ago the first Cleveland day school Braille class was opened. They must have been brave souls, indeed, who sponsored this departure from the traditional education for the blind. Chicago and Cincinnati had such classes, but they were far from an established and proven adventure. These classes were promoted as the right of a child in a democracy where the public schools provided for the education of the children of all the people. Their sponsors had had the courage to insist on

the right of the blind child to secure his education while living in his own home. The idea of the use of the home as a contributing factor in the education of the blind child may have grown up with the evaluating of the assets of the day school system. By the time I came into the day school field it was a well established fact that education was not confined to the schoolroom, that a class established in a specially equipped room with a specially trained teacher was not sufficient but that the day school must extend its work into the home and that the parents' help must be secured in the education of their blind child. A special worker, known as a visiting teacher, had already been included in the set-up for Braille class personnel.

For the benefit of those unacquainted with the term, visiting teacher, for the normally sighted is one who usually has been a teacher and who has been trained as a social worker with special reference to mental hygiene. She is connected with the school, understands its viewpoint but is not actually engaged in teaching. Her job is to help the school child who has problems or is a problem in the school's eyes. She is free to study the child, his home and neighborhood in order to do this.

The visiting teacher in the day school department for Braille classes is much the same sort of person. There was a need for someone to carry over into the out-of-school hours the same sort of training the school was trying to give in the five and one-half hours with the child in school, as well as to supplement this training. Her duties were varied and included many such things as office routine in connection with Braille embossing, the management of student readers, assistance in arrangements and aiding in transportation to concerts, field trips and dancing classes, etc., but in the main much opportunity was available for contacts with individual children and families and for extensive case studies and treatment. As the years have gone on and with retrenchments in school expenses, combinations of jobs have resulted and her job now includes educational and vocational guidance of senior high pupils and college students, all the work of the pre-school child and today even supervision of the Braille classes.

With this widening of the scope of the work and limiting of the time for actual work with individual child and family, it has been necessary to reorganize and short-cut ways of procedure.

Even in the early days we thought of the visiting teacher as a liason between home and school carrying the benefits and the knowledge of one to the other. In the same way she sought out the facilities for health and recreation in the community and made these available to the child. Even then we knew the wisdom of permitting the child to feel that he had achieved some adjustment by himself. We had an elaborate arrangement, for instance, for getting boys into Scout organizations. The visiting teacher approached the Scout Headquarters, found out where the troop in a boy's neighborhood was located and went over the situation with the scout leader, pointing out what might be expected of the child and ways in which scouting could be adapted to the child's use. Meantime, the teacher had been building up interest in Boy Scouts at school. Soon the boy asked about a troop. The teacher inquired of the visiting teacher and presto! the boy received a letter of invitation from a scout master. Today we do it less subtly—perhaps due in part to the greater understanding among group workers resulting from acquaintance with the day school boys and girls who have taken their places in the scout groups through the past years. We have adopted a new course—to let our boys and girls do some of their own planning and entering into such groups. Last month a teacher reporting on her home visit, made once a semester on each child, entered on her report—"Recreation and Clubs: None." I investigated the club facilities in the neighborhood and suggested that he ought to belong to one. She asked him about the clubs, mentioning one and asked if he could inquire about it. Within a few days he found his cousin belonged to the club

and had himself joined it. It is not by chance that a mother came to me recently, asking for a camp placement this summer as her nine year old boy is not associating as satisfactorily as she desires with other children. For many years we sought out the parents and urged them, not always with success, to send their children to camps with the sighted. This mother had conferred often with the visiting teacher during her child's kindergarten attendance, has visited frequently with the class teachers and knows the degree of social adjustment expected. We can now expect her to complete her own arrangements after the visiting teacher recommends a camp.

Out of the experiences in the contacts with many Braille class children from kindergarten through high school, and out of this pressure to achieve more with less time expended, I have come to consider the roll of a visiting teacher in a new light. I look upon her as a co-ordinator of the existing facilities through which the Braille class child may grow as he is able. She is far enough from the schoolroom and from the home and from the problem to take an objective view—she is not involved emotionally with the pupil-teacher, the teacher-parent or the parent-child relation. She sees the child from the elementary teachers' view point, and from that of the junior high school, and again, as her own charge in high school, and so is able to get a long view of what sort of individual he is. She can go into the home in the child's absence, as the teacher cannot. She can also contact the workers in the medical and social organization of the community and enlist their aid. Always it has been the policy to point the way and let the available agency, be it home, school or community, work out the specific problem. Often however, eagerness for the desired result or the unsatisfactory functioning of the agency, inspired the visiting teacher to participate in this treatment herself, with the result that the functioning of other sources continued to be unsatisfactory. Now, when necessity no longer permits this activity on the visiting teacher's part, it has been extremely interesting to find what a parent, teacher, agency worker, friends, etc., can do when challenged. This is especially true in the home. A suggestion made, a kindly criticism of faulty treatment, left to sink in often results in a following out over a period on the part of the parents themselves of the training, or a change in their attitude. This working out by themselves of such changes is very valuable. The child to whom the visiting teacher always furnished playthings, seldom is supplied any by the parents. The child whose parents find a way of getting him to out-of-school social functions is not left at home when the visiting teacher finds it impossible to do so as in the case of a child who has been taken by the visiting teacher. The parent who is resourceful in assisting his Braille class child in school work will also be helpful to his child in his social and vocational adjustments. As he exercises this resourcefulness so he becomes even better able and more interested in this.

This philosophy of developing self-independence in family and child is consistent with changing philosophy in social work. The visiting teacher is primarily a case worker. Miss Evelyn McKay of the American Foundation for the Blind has a very concise definition of case work which she calls her 1, 2 and 3. The object of case work, says she, is (1) to help the individual to develop all his assets and abilities and to minimize his handicaps. (2) to help him find suitable outlets social, emotional, and economic in the community, and (3) to do these two things in such a way that he becomes increasingly capable of handling his own problems and eventually independent of the agency. With one exception, I believe this is an excellent statement of the visiting teacher's objective for the Braille class child.

The finding of economic outlets does not fall within the scope of the school days. However, it is part of the school's work to develop the child's personality so that he may succeed, with or without the help of an agency for the adult blind, in finding

such outlets.

There is an important part the school can play in this preparation. I do not refer to the time honored function of the school in fact accumulating and training in skills. I do not wish to minimize the importance of these, but there are more failures among our blind youth based on inability to get along with other people and to put oneself across than in failure in preparation in school subjects. I should put first in our objectives that which you may call character building, integration, adjustment, personality development, or what you like.

John Dewey has said "Education is life itself, not a process of getting ready for the future, but of rich and happy and purposeful living at each moment of life." In our day school classes the child is provided in school daily with an opportunity to carry on in his community the living that he is being prepared for in school. It is the teacher's task not only to equip him with the tools for proceeding with his education, but also to see that he is using these in connection with his sighted playmates daily in school. Morever, she also arranges and encourages participation on the school ground and in the after-school life. Where this cannot be achieved through her contacts with the child and the members of the family she sees, she can call on the visiting teacher to help out. Especially where the emotional life of the child is not developing satisfactorily and outlets for this are not provided in home and community it may be necessary for the visiting teacher to work with the family and the neighborhood agencies and sometimes when trouble is too deep seated to call on the facilities of a guidance center.

The set-up of our schools with the braille class teacher to supply the special education in the use of Braille tools while oral recitation is carried on with the normally sighted, furnishes an opportunity for the gradual development of independence. As the child goes on to junior high he is gradually assuming more personal responsibility in the preparation of the work for the classes in competition with the sighted. Thus he is more ready for his work in senior high where he no longer can depend on a special teacher. He attends as an ordinary student receiving assistance in adjusting his preparation through the visiting teacher. She contacts his teachers, enlisting their sympathetic understanding and the aid of some member of the staff in obtaining student readers. A fine opportunity is given here for the gradual development of more and more independence on the Braille class pupil's part, as his ability permits, in assuming the task of making these adjustments himself—talking to his teachers about his way of working, enlisting their help, seeking assistance for obtaining readers, even finding someone willing to do this work and submitting his choice for approval. It is the policy of the visiting teacher to permit and to encourage the growth of such independence.

This improved independence brings better social adjustment. With this comes participation in school extra-curricular activities. Again he finds an opportunity to be of service in some club—another stepping stone to a place of usefulness in the smaller community of the school and his group of school-mates. The boy or girl who is a reporter or obtains advertisements for his school paper, who acts on committees in service clubs will be the young man who later continues such activities in adult life.

The fact that our facilities for the child are not all under one roof has its advantages in this matter of growth of independence and in the widening of the child's experiences. At the same time it makes our problem more difficult than that of the residential school. With the exception of the books in immediate school use, our library, located in our large main Public Library, is another agency. We are sometimes put to it to get as much use of this as we would like. The visiting teacher must be alert to grasp any opportunity to promote this. During the past year such an opportunity came in the

volunteering of a one-time Braille class teacher from another state, now a resident of Cleveland, to give service of some sort to Braille class pupils. After some study of possibilities, she was given a very small group of children who needed extra help in Braille reading. The meeting place of this group, was at the reading room for the blind in the public library. In addition to serving the purpose for which it was established, it has netted a greater independence in these children's getting out, a better acquaintance with the library and its facilities, a greater interest in books and a nucleus for a real reading club which will include other members next year and will, we hope, promote not only more reading but better taste in reading material as it is already doing in a small way with the present members. It will thus make them more ready to participate with the sighted pupils in junior and senior high in their clubs.

We are hard pressed at times with our small homogeneous groups to provide sufficient manual training for our pupils. For the boys this is met by a Saturday morning group instructed by a teacher of normally sighted students who has had years of experience with blind boys. Occasionally a well trained lad who is clever with his hands and has a little sight may join a class with the sighted. This is likewise true for the girls in cooking and in sewing after they have had initial instruction from the Braille class teacher. The limited work in this field means that the visiting teacher must help to find for these boys and girls opportunity to continue these pursuits, woodwork, metal work, cooking and sewing in out of school hours. With the cooperation of the parents, and of community organizations, outlets for this are found in the home, in cooking sewing clubs and radio and craft clubs. Especially in the home very practical application of these skills can be made under conditions which the individual meets in life. There is advantage in gaining the parents' understanding and help in order that this work can be repeated again and again as is necessary for the Braille class child to be able to do a task independently.

All such activities, together with the school training, we believe help to fulfill our No. 1 of the case workers' objectives (to help the individual to develop all his assets and abilities and to minimize his handicaps). They help also to build up in the child an ability to express himself, to be able to find emotional outlets rather than to be always kept back from participation because of his blindness. Unfortunately, our ability to work on this problem in the school comes after many forces have been at work in the years before school.

The newer psychology stresses the constructive, preventive rather than corrective measures. So when the first grade children were found dependent, lacking in self-reliance and initiative, already either capitalizing on their handicap or with dispositions warped by frustrations from its restrictions on them, pre-school work was started. By going back into the years that go before school, we have been able to lay foundations and to build up, thus eliminating much of the undoing of faulty training necessitated by the unwise handling of these early years. This is true, not only in the field of physical development but also in emotional development. By these contacts with the parents, it is often possible to get a different philosophy on their part, an attitude toward the child's handicap, a different way of treating it in the home life so that conflicts over his own condition are reduced.

There is a very close association between the early development of the physical senses, the stabilization of the emotional control and the resultant mental development. With the blind child, breadth of experience is limited by the hand co-ordination and as this is developed and allowed and encouraged by his family, so his opportunity for mental growth is greater. The child who is absorbed with the importance of his blindness or is constantly reminded of other children's thoughtlessness and neglect of him as a blind child does not achieve a normal relationship with

these playmates and is thereby deprived of the chances for growth that these relationships offer. Here is the beginning of learning how to get on with other people, perhaps one of the most valuable of life's lessons.

There are many well-meaning parents who tell me, "My child shall never know how I grieve about his condition." But their actions, the tone of the voice, the little extra pat given the child, the little indulgencies not shown the normally sighted children, even the failure to mention the condition, all speak louder than words to any child and especially to the blind child who is more sensitive to moods and feelings. I do not mean that a blind child should not have tender sympathy—he needs it in abundance. The parent, however, is encouraged to let it be sympathy and not pity, to be sure that it is shown so as to give the child merely a sense of security and not to build up dependence. They are urged to see that the child has, as Chave puts it in "Personality Development in Children,"—"an abundant and satisfying life and yet not make him dependent or too expectant."

The parents are further urged not only to avoid doing too much for the blind child, but also to furnish opportunity for him to do some things for them, for his brothers and sisters, or for the home. For his own well being, for his self esteem, he must find that he is needed in his family, that his service has value.

So the visiting teacher strives to have the parents of the pre-school child help him to be the kind of child that his natural endowment intended him to be, to grow at his own rate and to do this in spite of the handicap blindness has placed upon him.

Although the day school set-up makes no provision for any formal schooling below the fifth year of age, the visiting teacher watches for opportunities provided for sighted children in which the Braille class child can participate with profit. Some homes provide many such contacts. Some children are well able, even without any sight, to go along in the activities available in the neighborhood. Other homes lack proper supervision, and some children find for one reason or another greater difficulty in making adjustments. At no time have I found too many experiences offered.

Occasionally a child is taken in at a nursery school for the sighted. The little boy of the music class goes also each week to a rhythm class at the Music School Settlement.

Mothers are encouraged to read books on child training, to join parental training clubs. Where this cannot be arranged or with illiterate parents, the visiting teacher must herself help them. We have been especially fortunate in the last few years to have for our mental testing the part time of a psychologist whose major work is done in a special project for parental training of parents of very young children. Her advise to the parent at the close of the test is of great value.

I cannot stress too much the importance of this part of the work. I feel strongly that as Mr. Gavit writes in his article on "The Beginnings and the Ends", "What they, the parents, do and fail to do, greatly conditions all that comes after, going far to determine what this new Personality will contribute to his neighborhood, his country and to the world." (1)

The cause of the Braille class child is set forth well in the "Purposes of Education in American Democracy," a publication of the Educational Policies Commission, in these words, "democratic school systems will provide for every child an opportunity which that particular child can really accept, an opportunity not inferior in its own kind to that given to others . . . (one which) merely seeks to remove all artificial barriers and assist every man to amount to as much as his ability, character and industry permit."

Carleton Washburne, writing in the Survey Graphic of October, 1939, devoted to The Challenge of Democracy to Education, has set forth as his Goals in Education:

(1) *Survey Graphic—October* 1939.

1. To develop in every child physical and emotional well-being.

2. To guide every child to a personally and socially satisfying fulfillment of his own individual development pattern.

3. To help every child to acquire adequate mastery of the means of social intercourse, means which include the functional parts of three R's and the most commonly used knowledge and concepts of our culture.

4. To give to every child a realization that his well-being is inextricably bound up with the well-being of his community, his state, his nation and of humanity the world over.

I should like to call your attention to the fact that Mr. Washburne gives first and second places to those things for which the visiting teacher strives, while to those things which without question we expect the schools to provide he gives third place.

And lastly, I believe we may feel confident that having achieved the three goals, we can look forward to the successful "well-being of his community, state, and nation," in so far as the blind individual's part is concerned.

I can make no better summing up than to quote the words of Lawrence K. Frank (1) who says that "The fundamental needs of the child are in truth the fundamental needs of society." Let us play our part in meeting the fundamental needs of the child. Let us provide for him a place of security in home and in school. Let us instill in him a feeling of usefulness, and the ability to be useful in so far as his total make-up permits. Then indeed may we have faith that he will be able to find himself and play his part in the present fast changing society.

(1) *L. K. Frank—The Fundamental Needs of the Child—Mental Hygiene, Vol. XXII, No. 3—July* 1938.

FOURTH SESSION

TUESDAY EVENING, JUNE 25—8:00 O'CLOCK

PLACE: STEPHEN C. FOSTER MEMORIAL AUDITORIUM

"TEACHING THE BLIND IN EGYPT"

RIAD ASKAR
Head of Special Education, Kingdom of Egypt

In ancient times Egypt was called "the country of the blind". This seems to have been true, although it is not the only country in the world that deserves that name. According to the census returns available to us the number of blind persons in Egypt in 1927 was 155,000 which is one of the highest in the world. This shows us the gravity of the situation, and the importance of taking decisive measures for the prevention of blindness as well as the care and education of the blind. Let us now briefly inquire into the causes of such a high percentage.

Climatic conditions seem to be among the most effective factors in producing a high percentage of eye troubles in Egypt. The country is situated in the northeastern corner of Africa in the belt of the great Saharas of the world. Excessive heat as well as excessive dryness are injurious to the eye. They may not necessarily be conducive to eye trouble since there are a great number of people who have never had any serious eye trouble. Yet these climatic conditions favor any factors leading to such troubles and even to blindness. The sun shines brightly over 300 days in the year. The glare of the Egyptian sun can be tolerated only by the best eyes. A large number of the population, even among those with good vision find it very often necessary to use dark glasses to subdue the bright reflection of the sun's rays.

Heat causes perspiration and congestion of the blood vessels of the eyes and may thus lead to inflammation.

But dryness seems to be one of the worst conditions for the eye. In the summer season the sun's rays scorch both men and earth. The wind blows the sands from one place to another. In the cities vehicles pound the sand into fine particles thus making it easier for the wind to blow it about. Automobiles, also, by their fast movement produce behind them a halo of dust in addition to the fumes they infuse into the air. One of our biggest problems has been to fight down the fine dust suspended in the air. Special tanks on automobiles spray water on the streets, but since the use of asphalt in the construction of roads, this has been unnecessary since the problem of dust can thus be done away with. All the important streets in the big cities have been covered with asphalt, but there are still many country roads, which have to be sprayed from time to time to avoid the spreading of dust. The danger of dust is not only in the fact that it causes inflammation of the eye and irritation but also in carrying germs into the eyes and lungs of both man and beast.

These climatic conditions just mentioned lead to one of the worst evils causing eye diseases and consequently blindness, namely flies. Climatic as well as poor social and educational conditions have helped the fly to thrive on the eyes of the population and spread disease from the sick to the healthy. The lack of rain which might purify the air, the warm and never severely cold climate, the dry sands, the scarcity of water in the country at certain times of the year, and the lack of education among a high percentage of the population, all these are conditions that contributed to that high percentage of eye diseases and blindness.

The Egyptian public as well as the government are by no means unaware of the necessity of combatting these conditions. The percentage of blindness in

modern cities must be much smaller now than it was in previous times, although we cannot draw conclusive inferences in this respect because of the lack of definite statistics in those older times. The obstacle, however, has always been the lack of funds, which has tied the hands of authorities more than ignorance or negligence. To combat natural conditions is by no means an easy task. It is an endless strife between man and the environment. A temporary campaign is fruitless. What is needed is constant vigil by both medical men and educators. To change natural conditions is impossible, but all we can do is to minimize their evil effects by curing disease and preventing infection. This means a constant heavy budget, which the country has not been able to afford to a great extent until fairly recent times.

Attempts, there have been, both medical and educational, but they were sporadic, half-hearted, unorganized, and ill informed. The last twenty years or so have brought a new phase. Medical care has been generously given. As far as funds go, it has been successful both at treatment and prevention.

Educational measures have been provided also in the form of ever increasing schools and propaganda. The public also is taking more and more interest in the cause of the blind. Private societies have been formed. Funds have been raised by appeals both to the public and the government. The government is taking also an increasing interest in the problem. The authorities are being gradually convinced of taking action. This is really an important step since much of pioneer work has to be done by the government. In a country that was long subdued, and in which education was limited, it is only natural that the government should take the lead in organizing and putting into practice new schemes. This is why most of the efforts whether in education or medical care, so far, have come from the governmental departments.

There is another reason yet more important. Individual efforts are weak, unorganized and lack funds. The government, on the other hand has both organization and funds. It is only to be regretted that the latter have not been more abundant.

Now let us come down to actual facts and figures, scanty as they are. The country has been busy fighting down illiteracy and disease. More and more funds are being devoted to combatting handicap-producing diseases and epidemics.

We can divide our account into the three following sections, namely charity, medical provisions and educational provisions. We shall speak about charity first.

Charity

Ever since ancient times the blind were kindly treated in Egypt. They were reported by historians to be gainfully employed and used as professional mourners. We have not enough data as to the care of those blind persons who were unable to earn their living. The Jewish and Christian religions continued that tolerant attitude and provided charity for the poor, including the blind. With the conquest of Egypt by the Arabs, Islams or Mohammedans prevailed and is still the dominant faith. One of the fundamental tenets of a good Moslem is charity. The faithful are urged to give whenever they can, but they have to give on three definite occasions. One is at the end of Ramadan, which is the month of fasting which is followed by the Bairan (Christmas). The second is the morning of the big Bairam, when those who can, have to slay a sheep and give it away to the poor. The third occasion comes at the end of the year when every wealthy Moslem has to give away two and a half percent of his surplus money. With this charity much work for the blind was done in the Middle Ages. Asylums and homes were established for the blind and the insane, both by the sultans or khalifs and by private wealthy individuals. Schools were established and admitted the blind as well as the sighted. In many cases asylums and hospitals were adjoining the schools. But one of the most outstanding achievements arising out of the charity of the Middle Ages was the Azhar University which is the oldest uni-

versity in the world. It was founded by the Fatimide General Jauhar. It has been supported by considerable funds from charity and private contributions, since it has always been a theological university. Ever since its establishment it has admitted the blind and the sighted without any discrimination. Until the middle of the last century it was almost the only establishment for education. It supplied public education supported by charity during a time when the government did not recognize its responsibility for the education of the public.

But charity, abundant as it was, was unorganized and did not follow any certain medical or educational policy.

Medical Care

Medical care, however, was lacking in the modern scientific sense. Quacks exploited public credulity and treated eye disease by prescriptions that did more harm than good. Some learned men, not physicians dug up some prescriptions from old Greek and Arab books and applied them indiscriminately.

The modern period beginning with Mohammed Aly, the head of the present royal family, somewhere around the middle of the last century ushered in a new phase in the education and medical care not only of the handicapped but of the whole population. Medical and general education went hand in hand but the education of the handicapped lagged until the present century.

The appalling number of the blind stirred people to fight down eye diseases before they gave any thought to the education of the blind. We have already explained the natural causes that lead to eye trouble but, contrary to common belief, trachoma is not responsible for the majority of eye trouble or loss of sight, since it is only responsible for three to five percent of the total cases of blindness. Glaucoma has a higher percentage in Egypt than in any other country and causes a number of cases of blindness in advanced age. The ophthalmic section of the Ministry of Public Health has been growing rapidly and is doing very valuable services all over the country. In fact the Ministry of Public Health was only a department of the Ministry of Interior about fifteen years ago. Now it is a full fledged ministry with a budget as big as that of the ministry of Interior itself. By health education, people are coming to learn that eye diseases should be treated immediately, and less and less faith is being placed in quacks and "home-made" prescriptions. All over the country now, there are ophthalmic hospitals ready to give treatment for the asking without charge and even give the medicine free.

The present methods of treating the complications of ophthalmia are almost sure to stop it. If this steady effort on the part of the Ministry of Public Health is kept up steadily then it may be hoped that in time blindness in Egypt will be stamped out completely or at least diminished.

In addition to properly built and well equipped hospitals there is a large number of ophthalmic migratory clinics which travel through the heart of the country, thus bringing treatment within reach of the smaller and more remote villages.

The modern campaign against trachoma was begun in 1904 when Mr. Ernest Castle gave $200,000 the profit of which was to be spent on migratory clinics that were to be housed in tents and to move from one city to another. This idea of migratory clinics was taken from Russia. Until 1923 hospitals had largely been dependent on private contributions, but since then the government has stepped into the picture. The municipalities have also undertaken to establish and maintain a large number of hospitals. As for the management of these hospitals from the administrative as well as the medical point of view, they all come under the Ministry of Public Health, which exercises the strictest supervision. They are regularly inspected not less than once every three months by any means, sometimes more of course. Experienced doctors give regular courses in ophthalmology and in the care of the eye to newly graduated doctors.

In 1904 there was only one hospital which gave treatment to 2,954 patients. In 1930 the number of hospitals jumped up to 46 and the number of patients to 526,000 patients. In 1930 the number of hospitals was 66 stable hospitals and 15 migratory ones while the number of patients was 1,213,781. The number of operations was 351,136.

These figures in themselves may be meaningless, but what we should note is the rapid increase in the medical care given which, were it not for the lack of funds, would have been much greater. In the schools each year a doctor visits each school in November and examines the eyes of all the pupils. His work is checked and supervised by an inspecting doctor. Statistics are then compiled and treatment begins in December lasting for three months. In March a new examination is made and new statistics are evolved for the sake of comparison. The Ministry of Public Health has laid down the strictest program for campaign against eye diseases which may be summarized in the following; 1. Increasing and strictly supervised ophthalmic units. 2. The establishment of a medical museum. 3. Articles in newspapers and magazines for the education of the public in the care of the eye. 4. Public lectures by the radio. 5. Detailed advice given by the doctors in hospitals to the patients coming for treatments. 6. Reorganization of the village and rebuilding as many villages as can be according to the rules of hygiene.

Education

In 1896 a few charitably minded individuals in Cairo started a school for the blind at Zeitoun, a suburb of Cairo. At first the school did not have a very strong financial basis owing to the fact that it depended on private contributions which were not abundant. But with the help of the Ministry of Education it has been able to survive and its financial basis has become secure.

There are many schools started and maintained by societies and private charities, as well as homes and workshops in Cairo and Alexandria.

But the most effective efforts have come from the Ministry of Education. It began its efforts in 1927, when it started a teachers training course for the blind adjoining the Norman School for girls in Boulac. For the purposes of teaching practice, an elementary school for blind children was also founded in the vicinity of the Normal School. In 1936 the school contained 41 pupils but now its total enrollment has risen to 200. The ages of the pupils range from 5 to 15. Now there are schools for the blind all over the country almost in every city, but unfortunately I have no precise statistics as regards their number or the total enrollment of pupils.

In addition to the academic subjects taught in these schools the following industries are being taught: brush making, broom making, chair caneing, sculpture, weaving, basketry, the making of tables, and bead work.

Al Azhar University, as we had said before, has been giving educational opportunities to the blind ever since olden times. Some of its graduates have attained high eminence in the social, academic and political life of the country. Until last year the dean of the Faculty of Arts in Cairo University, Dr. Taha Huseun, was a blind man of high intelligence and outstanding personality. He had graduated from Al Azhar and was sent to France on a scholarship from the government. On his return he was appointed a professor at the Egyptian University, and was later elected dean. He has been one of the most influential single personalities in both politics and literature.

The Azhar University has lately introduced far reaching reforms in all its departments including the blind. They had always attended the same classes and examinations as the sighted, but were exempted from examinations in certain subjects that demanded the use of sight and could not be performed for them by others such as geometry, drawing, etc.

In 1936 the Azhar authorities asked the Ministry of Education to form a committee

to report on the foundation of a special school for the blind students of Al Azhar. The committee met and reported on the problem assigned to it. The school has not been founded yet, but it is hoped it will be founded in the near future.

Braille

It would be impossible to close this short talk without mentioning a word about Braille. Braille has been adapted to the arabic letters, and is taught in schools for the blind. Books in Braille, however are very few, and are written by hand. Among the plans contemplated is the establishment of a Braille press. This of course will be achieved when there is a sufficient number of blind Braille readers.

One of the greatest schemes contemplated by the Ministry of Education is the establishment of an institute for the training of teachers of the handicapped, including the blind. Schools for the different types of handicapped will be attached to it. They may not be necessarily in the same building, or even in the same district. But they will be under its technical direction, until the first experimental stage is passed. After that other schools will be established in the light of the experience gained.

SECTIONAL MEETING — DIETETICS AND HEALTH

WEDNESDAY MORNING, JUNE 26—9:00 TO 12:00 O'CLOCK

OLENE PETERSON, Michigan, Chairman

"IMPORTANCE OF DIET IN THE HEALTH OF THE BLIND CHILD"

OLENE PETERSON, R. N.
Michigan School for the Blind

I have been asked to write a paper regarding the relationship of diet to the general health of blind children. Of interest along this line are some of the observations made during the past year at the Michigan School for the Blind showing the effect of diet on the eyes. We have been surprised at the difference proper food has made both in the health of the children and the rapid recovery of diseased conditions of the eyes.

The food requirements of children and its relationship to disease has long been the subject of much discussion and extensive study by many trained investigators. I will mention briefly a few of the more important results of these studies which are directly related to the general health of the less active blind child.

Carbohydrates, proteins, fats, minerals, vitamins, and water supply the body with all the elements necessary for normal growth and health. Deficiency in these elements results in diseases of the different organs and tissues. Pellagra, scurvy, beriberi and rickets are some the diseases directly related to food deficiencies in which the skin, the mucous membranes, the nerves, and the bones are directly affected, sometimes with disastrous results.

Malnutrition is a condition of faulty nourishment of the body and may be seen in children at any period during growth. Some of the causes of malnutrition are, first, lack of appetite. Ordinarily children depend upon their appetite as a guide to the amount of food they eat, but no appetite is entirely to be trusted. Children may have no appetite for a food because it makes no appeal to them either in looks or in taste. A bad taste in the mouth resulting from bad teeth, adenoids, and constipation has a very decided effect on the appetite. This condition is perhaps more evident in the morning than at any other time and is one of the reasons for "not feeling hungry" at breakfast time. A deficiency in the diet, as will be shown later, is another contributing cause for the lack

of appetite. A second cause of malnutrition is lack of concentrated foods. As a child grows older and requires a greater number of calories, a larger supply of concentrated foods should be added to the diet or his energy needs will not be covered. This list includes cream, butter, eggs and cheese. Third, the practice of eating between meals is one of the most common causes which tend to lower daily food consumption. This is especially true when sweets are eaten, because they dull the appetite. Then there are special forms of malnutrition which occur even when the child eats enough food, but not the proper kind of food. An excessively fat child may suffer malnutrition.

A calory is the name of the unit by which we measure the fuel value of foods. We do not need to worry too much about calories. However, the number of calories to be supplied is of great importance in cases of malnutrition and obesity. We have found that the average muscular activity per child is almost bound to be below normal. The normal child runs, skips and jumps half the time instead of walking and often gets out of breath. He makes a hundred small movements daily in response to all sorts of outer stimuli, he plays games hard, he tears up and down stairs and corridors. All these things are slowed down to a very minimal tempo with the blind child, consequently the actual fuel he uses and needs is definitely less. Care should be taken not to have an excess of carbohydrates in the diet. Feed a relatively inactive child on excess starch and he becomes fat, dull, susceptible to all catarrhal complaints, with an unhealthy skin and lessened growth. In planning the ideal diet for these children, the articles of diet must include not only enough energy producing foods, but must contain proteins, minerals and vitamins of the right kind and in sufficient quantities. A failure to provide any one or more of these food materials will eventually result in malnutrition. The health of the eye, as well as the general health of the body is affected by diet deficiencies and by faulty nutrition. Such conditions as conjuctivitis, recurring lid cysts and styes with other external inflammations may be an indication for a regulation of diet.

The diet factors to be considered are:

1. The balance between proteins, carbohydrates and fats.
2. The necessary minerals.
3. The vitamin content of food.

To enlarge upon these diet factors let us first consider proteins. In order to build muscles and other tissues and replace those broken down by the wear and tear of daily living, each day's food must include some protein. Since children require protein for growth as well as repair, the amount needed by children is larger in proportion to their size than the amount needed by adults. Milk, eggs, cheese, meat, fish and fowl contain the best protein for growth. Cereal, nuts, beans, peas, soy beans and vegetables and fruits in general, supply protein less valuable for growth, but useful in supplementing the protein from animal sources. If the diet then includes a generous supply of these common foods there is but little danger of an inadequate protein supply.

Another food element, carbohydrates, comprises a large portion of the heat and energy producing substances in the diet. These are derived from food substances containing sugar and starches such as cereals, potatoes, rice, macaroni, spaghetti and bread.

Fats are also necessary for nutrition and are readily converted into heat and energy. In addition to milk, cream and butter, the food substances rich in fat are: oleomargarine, salad dressing oils, fat meats, peanut butter and chocolate. It is hardly necessary in this country to say much about oleomargarine. It is a useful fat, but it should not be given to children to replace butter as it lacks the growth factor.

For life and growth we also require certain minerals such as iron, phosphorus, and calcium. These are necessary for the growing skeleton, for blood formation and for the proper functioning of the body.

Fortunately, these minerals are present in most of the common foods. However, these so-called common foods—milk, eggs, lean meats, fresh vegetables and fruits, are often a neglected part of a child's diet, and unless a careful check is made, these foods will not be present in sufficient amounts.

Milk, one of the best known and most used of the common foods for children, is rich in calcium and phosphorus, and contains in the proper proportions nearly all of the minerals necessary to the well being of the body, except iron. About three cups of milk a day is sufficient for children, for if they are allowed to drink too much milk they will not eat enough other food. Iron is found in meat, eggs, and green leafy vegetables, and is needed for the blood.

Next let us look at the part diet plays in the development of the child's teeth and bones. Teeth are really only modified bone and need exactly the same elements as do the bones. They are composed largely of calcium and phosphorus. Scientists have learned that through the chemical action of vitamin D, calcium and phosphorus, once they are absorbed into the blood, are properly used for building and strengthening bones and teeth. In other words, the use of vitamin D is necessary before calcium and phosphorus can be fully utilized by the body for bones and teeth. That is why sunshine is so valuable, the sun's ultra-violet rays acting on the exposed skin of the body cause the formation of vitamin D. Cod-liver oil, popularly known as "bottled sunshine" is rich in this vitamin. It is a food, not a medicine, and its effects upon the child's body is similar to that of the ultra-violet rays of the sun. Vitamin D is one of the strongest allies we have in fighting the deficiencies in the teeth that make them prone to decay. Vitamin C also plays a vital part in the general health of the teeth and gums. Deficiency may result in gum disorders such as pyorrhea. Vitamin C is found primarily in citrous fruits and tomatoes.

When plain sugar, especially in the form of candy, is included in the child's diet, it should be used sparingly. This, of course, applies also to pastries, sweet delicacies, and other sugary things. The cause of dental decay, as we have already pointed out, lies much deeper than any over-indulgence in sweets, but many dentists feel that such an over-indulgence is a contributing factor to dental decay, and prevents the eating of needed food. Moreover, excess consumption of sugar is not good for the body as a whole. Honey should be substituted in the child's diet in place of sugar.

The value of the vitamins has already been mentioned in instances, but for the benefit of those to whom a vitamin is merely something that a person needs a lot of, I might explain that vitamins are chemical substances found in minute quantities in natural foods. They are necessary to normal nutrition, growth and general well-being, and each performs special functions in the body. We have vitamins A B C D E G K and P. Taken as a group, vitamins serve to promote growth, maintain body tone and vigor, protect the body against infection and assist the body to function properly and to obtain full benefit of other food constituents. Vitamin deficiencies are much more common than is generally recognized, and may occur in spite of an apparently normal food intake. Raw vegetables such as cabbage, lettuce, carrots, tomatoes, celery, and fresh fruits of all kinds, whole grain cereals and whole wheat bread are high in vitamin content, and should be generously included in the diet. In cases of infection or disease, the amount of vitamins required is much greater than under normal conditions. Convalescence is also shortened by feeding a high vitamin diet.

For example, one pupil at our school afflicted with corneal ulcers and photophobia has attacks of pain, marked sensitiveness to light, and watering of the eyes. These attacks we find are very often due to over-indulgence in carbohydrates and responds quickly to a diet of orange and tomato juice for twenty-four hours followed by a low carbohydrate diet. When her eyes show signs of an approaching

attack, she immediately reduces her diet of her own accord, indicating that this pupil, herself, realizes the importance of diet in her case.

We have also found that in cases of injury to the eye, recovery is hastened by a low carbohydrate diet and plenty of fruit and vegetables. About two months ago one of the small boys suffered a rupture of the sclera and cornea caused by a blow in the eye with a ball. He was placed on a very strict diet. For the first week, only orange and tomato juice was given. Later on, vegetables of all kinds, both raw and cooked, whole wheat cereal (with wheat germ added) and about three cups of milk daily were included in his diet. Raisins and honey were the only sweets allowed. No bread, potatoes, or any other carbohydrates were given for several weeks, and then were added to his diet in small amounts. His teacher states that since he has been able to return to school he has had more pep and does better work than ever before. We feel that this is one example of what proper food can do, as he received no treatment other than absolute rest and diet. His eye has healed perfectly and his vision is as good as before. His other eye is artificial, and had he lost the vision of this eye he would have been totally blind.

Vitamin A preserves the bodies' resistance to infections of the eyes, ears, and respiratory systems. It is often called the ophthalmic vitamin, and it is found in every well balanced normal diet. The lack of this vitamin is accompanied by deficiency symptoms which are evident wherever children are poorly nourished as the result of an insufficiency of proper food such as milk, cream, eggs, vegetables and fruits. A survey of old records reveals the frequent association of ocular diseases with famines caused by drought, poor crops and war. Ophthalmologists have repeatedly referred to night blindness, xerophthalmia, corneal lesions, and several forms of chorioretinities as being due to faulty nutrition. These eye disturbances result from conditions so complicated that it is not possible to attribute all to the lack of a single vitamin. Gross vitamin deficiency seems to be somewhat more common in Europe and Asia than in this country.

Recent studies made in the United States seem to indicate the surprising prevalence of vitamin A deficiency particularly among children. The diagnosis is based on the assumption that individuals who show poor adaptation to the dark probably have a vitamin A deficiency. It is possible that these conditions are now more readily detected because of better understanding of the subject and because of their similarity to some of the disturbances produced experimentally in the laboratory animal by deficient diets. Vitamin deficiencies occur at all ages and are not confined to the poor. They can and do occur even in prosperous communities. Vitamin A is necessary in the formation of visual purple in the retina. Visual purple is the purple pigment in the retinal rods which aids in the adaptation of the eyes to the dark. Vitamin A unites in the retina with a protein to form visual purple and the completeness of the conversion depends on the supply of vitamin A to the ocular tissue, which in turn is related to the supply in the entire body.

One of the earliest symptoms of the absence of Vitamin A is night blindness. Without there necessarily being an impairment of vision in the daytime, these children see imperfectly when night comes on. There is first a watering of the eyes, later a softening of the cornea, and when it has healed, the clear cornea has been replaced by white scar tissue and blindness is the consequence. An epidemic of Keratomalacia, as this disease is called, occurred in Denmark during the World War. The export of milk and butter left the children and mothers on a diet of substitutes which were deficient in the fat soluble vitamin A. The reports of 450 children were studied and analyzed. Twenty seven per cent became blind and thirty-five per cent retained the sight in one eye although in sixty-seven per cent both eyes had been involved. Also due to deficiency

of vitamin A are susceptibility to infections of various sorts, and abnormalities of the teeth.

Vitamin B is also very important, having for its function not only the protection of our very intricate and complicated nervous system, but also the stimulation of our appetite and the aiding of digestion. It is found in all whole grain cereals, beans, peas, peanuts, milk, liver, pork, lean meats, and most vegetables and fruits. In the nutrition of children it is desirable that all of the vitamins be present in quantities sufficient to more than sustain normal growth. This is especially true of vitamin B. Although it is not possible to make an accurate estimate of the quantity of Vitamin B needed, however, it is possible to judge by the types of food eaten whether or not the probable quantity consumed approaches the amount required. If the diet is made up largely of sugar and starchy foods such as white bread, rice, macaroni, and over-cooked vegetables, it is quite probable that the intake is below the amount needed.

Vitamin B deficiency is much more wide spread in this country than supposed, the ill consequences of the lack of vitamin B is especially distressing as they appear in children, because they often go unrecognized for what they are. Severe loss of appetite without apparent cause and some forms of cardiac disturbances among children may be associated with the lack of vitamin B.

A deficiency disease caused by the lack of vitamin B is known as Beriberi. It presents symptoms of multiple neuritis and is a condition most prevalent in countries where polished rice is used for food. It may, however, develop in other than rice eating populations where white flour is used to the exclusion of whole wheat flour.

Another disease now known to be due to a deficiency of vitamin B2 or G is Pellagra. It is an endemic disease characterized by redness of the skin, digestive disturbances and nervous symptoms. It is common in our southern states among the negroes and poorer whites who live upon cornmeal, molasses and salt pork.

Vitamin C prevents scurvy, strengthens capillaries, is necessary for sound teeth and gums. It is found in citrous fruits such as oranges, grapefruit and lemons, raw or canned tomatoes and raw leafy vegetables and raw fruits.

What we now know as Vitamin C was recognized as early as 1795 when the British navy controlled scurvy by administering lime juice to the sailors. From the experimental work and the clinical observations made with natural vitamin C, it has been proven beyond any doubt that vitamin C not only protects persons from scurvy, but that it also has many other important functions. Outstanding among the pathological conditions due to vitamin C deficiency is a weakening of blood capillaries. Many cases of hemorrhagic retinitis of various types have been treated with vitamin C and a balanced diet. The treatment seemed to shorten the length of time ordinarily required for the repair of this type of lesion.

To guarantee a sufficient amount of vitamin C, raw food should be included in the diet. As in most foods, this vitamin is destroyed by cooking.

Another equally valuable vitamin, is Vitamin D, which prevents rickets and is also needed by the body in building bones and teeth. It is produced in the body by sunshine acting on the exposed skin and is found in cod-liver, halibut and salmon oils. This vitamin is necessary throughout life, but it is required in the greatest amounts during infancy and childhood. Reinforcing the diet is needed particularly in cities where smoke screens the active rays of the sun and where children wear heavy clothing and remain indoors during the colder months. Sunlight is not effective under these conditions and Vitamin D should be provided during the winter months.

Vitamin G which was mentioned before in connection with Vitamin B2 is found in

lean meat, chicken, liver, buttermilk, green leafy vegetables and legumes. Deficiency results in Pellagra..

Since the vitamins E, K, and P are comparatively new or do not pertain especially to children, I have merely mentioned them.

From this discussion we have come to the conclusion that the blind child is affected greatly by improper diet. It must be remembered that the carbohydrate intake should be guarded and that the diet should include plenty of both raw and cooked vegetables and fresh fruits, so that sufficient vitamin and mineral requirements will be maintained. As was mentioned previously, a faulty diet affects the eye as well as the general health of the body. The knowledge of this fact should be of great importance to those interested in the well being of the blind child, also to students of nutrition, public health and social workers, and to those who may be called upon to give health advice of a general nature.

"PROPER EATING HABITS. HOW BEST TAUGHT TO THE BLIND CHILD"

KATHERINE D. HOLCOMB
Pennsylvania Institute for the Instruction of the Blind

"Do table manners occasionally get you down? They shouldn't for correct table manners are based on common-sense. But if these 'problem children' in table fare cause trained, sighted older people moments of indecision think what they must do to a child who cannot see."

The importance of good table manners among the blind cannot be overestimated. Nothing helps to make the blind acceptable in society more than good table manners. Good manners are the mark of a lady or a gentleman—words outmoded, but still useful. Emerson has said that "life is not so short but there is room for courtesy," and, to me, courtesy is the foundation of all good manners. If good manners are essential for the seeing, how much more so for the blind whose handicap makes it impossible for them to realize that certain mannerisms may be displeasing to table mates.

Someone has said that "eating is an action that requires all the alleviations of appropriate place and circumstance and all the adjuncts of neatness, beauty and delicacy with which refined social life can surround it to lift it above the plane of the material and the animal."

The teaching of good table manners to the blind is a difficult problem. In the first place, because they do not see, they cannot appreciate their importance; they cannot understand why certain habits are obnoxious but must take the word of the seeing for it. In the second place, they cannot imitate and many things which we take for granted and think a matter of simple common sense, even the most insignificant details, must be taught them. One of the first principles of pedagogy is, Find out what your pupils don't know."

The fundamental principle back of all work with manners is the inspiration of the pupil with the desire to possess good manners. Little can be accomplished with indifferent or antagonistic pupils. Always give a reason for a rule in manners. You will, thereby, earn the cooperation of your pupils and at the same time you will impress the rule upon their minds. But with all our efforts girls and boys are thoughtless and careless. Girls, at an earlier age than boys display an eagerness to cultivate good manners. It is usually among the older boys that this interest is awakened. Manners can be correlated with other school subjects. Our domestic science and our dramatics teachers have done excellent work in helping to improve the manners of our pupils. Social and etiquette

clubs are of great value in teaching this subject. Do not forget to be generous with praise for any interest shown or advancement made.

We cannot begin too early in the children's lives to teach table manners, not all at once, a little at a time and, gradually, we shall arrive at our goal. If only a personal satisfaction in good manners can be aroused the goal is easier to reach.

One of the first things that a pupil should be taught is, it seems to me, to be inconspicuous, to do or say nothing that will bring him into the lime light. This, especially applies to conversation at table, which should be on pleasant topics, not too much shop and not too argumentative. Conversation should be conducted in quiet, pleasing tones. Small groups are best for this training. Pupils should not be allowed to talk across the room. Just here let me give a recipe for table conversation. If each member of the group, before the meal, could think of some bright story or anecdote to tell, it would set the ball of conversation rolling and help greatly in the entertainment of the company. Do not let the pronoun I be predominant as is sometimes the case if one gets started on his or her hobby or work, although a little information might be enlightening or entertaining to the rest of the group.

Quotation:

"Each brought to the table his own small preoccupations, each went on revolving in his own private orbit instead of trying to unite the family in a cheerful circle of stimulating conversation. When we arose we were none of us better, or wiser, or happier. Only fuller."

"To the pleasure of dining well in good company each of us can add something. Just as one man, woman or child can sabotage the whole meal, so each one of us can contribute a living share to the oldest and cheerfulest of all human rituals."

Just when and where the criticism of table manners should take place is a question. The consensus of opinion, however, favors giving it at table as soon as the infringement of manners is noticed. "Strike while the iron is hot," but if the striking is done kindly and tactfully the most sensitive child will not suffer hurt and the rest of the group may benefit by the correction. This should be followed by individual and group instruction in the cottage.

The housemothers are the prime factors in the teaching of table manners and they should be chosen with the greatest care. They should be women of kindliness and refinement and thoroughly interested in their work.

This paper, to be of value to our schools, must be practical and I am, therefore, going to give a number of suggestions which we have found useful, even necessary at Overbrook.

First of all, insist upon good posture at table. This seems more difficult for those who have a little sight than for those who are totally blind, since the former have a tendency to bend over to see what is on the plate. Try to have the pupils sit erect, not too near to prevent of full play of hands and arms but not so far away that they must lean forward. "Don't go forward to meet your food," we say. Act naturally when at table. What if you do make some mistakes. Do not try so hard to be correct that people notice it. If a blind person is confronted with a new situation (and who is not?) he should have learned that it is wiser for him to suffer the single and limited embarrassment of asking the counsel of his nearest companion than to trust to luck and never know whether he is right or wrong.

Next in order comes the use of the napkin, so easily acquired by imitation but for which the most minute instructions must be given to the blind child. Let the napkin lie on the table until grace is said, then partly unfold it, under the table, and place it on the lap. After the meal, the napkin is refolded, again under the table, and placed at the left of the plate. If one is being entertained for only one meal, the napkin is left unfolded, an indication that

it is not to be used again by another person.

The proper use of silver and china should be taught as early as possible. This, again, must come gradually, the spoon and fork first, later, other pieces of silver and the china may be mastered. Hold the silver, a glass, a cup, properly in your own hand and let the pupil "see" it with his own hands, then let him practice holding it with his hand. Play tea parties for younger girls is a good way of teaching them proper table manners.

Never leave a cup with a spoon in it. The spoon, and sometimes the cup, are easily overturned and the contents of the cup spilled. Stir tea or coffee gently, do not scrape the spoon on the bottom of the cup. Do not rest the knife partly on the plate, partly on the table. When not in use, the knife should rest on the farther edge of the plate with the cutting edge toward one.

Here are a few more don'ts:

Don't play with your silver.

Don't refuse food. Learn to eat all kinds. It makes for better health and you will find yourself more acceptable wherever you are. One way to teach a child to like food he thinks he does not care for is to learn the history of that food, make it an interesting story and perhaps the child will venture to taste it and, in time, will learn to like it.

Don't gulp down a whole glass of water or milk.

Don't take another mouthful while the previous one has not been disposed of.

Don't criticize the food. This shows an entire lack of courtesy.

Drawing out a chair for a lady is a pleasant touch which our older boys are glad to learn. The absence of this courtesy is particularly noticeable in a restaurant. It seems to me that our pupils should be taught something about the choice of food in a public place. A full menu is often times bewildering. It is well, also, to ask the waiter to cut up the food, or at least serve it cut up. Always accept help graciously. One thing I think our blind never forget is to say, "Thank you." It seems a small thing to mention but we have found it necessary to do so and it marks the difference between good and poor table manners. Always dip the soup spoon away from you. Eat slowly and chew as quietly as possible with lips closed. All liquids should be taken noiselessly. Bouillon, or soup served in bouillon cups, may be drunk directly from the cup. Don't break crackers into the soup.

Many of our pupils come from foreign born parents and what may be considered good form in their country is considered very poor form in our country. We must be careful in our training not to give offense and make the pupil seem queer to his family when with them. Let us not forget that we must have the cooperation of the parents.

It is again difficult to decide whether the blind should be required to butter their bread or not. This can be done by placing a small piece of bread between the thumb and first finger and then applying the butter. This is awkward and it seems best to have a seeing person prepare the bread. Nothing irritates me more than to see a person butter a whole slice of bread on the hand. If a blind person butters his bread insist that he break it into small pieces. With meat we have much the same problem. I think blind people should learn to cut their meat in case they are ever in a position where they are obliged to but it usually saves an awkward situation to have others do it for them.

The use of a small crust of bread as a "pusher", a most unfortunate term to apply to this aid, is pretty generally advocated for blind people. Even for the seeing Emily Post says it is better to use a "pusher" than to chase a pea around the plate.

It is helpful, sometimes, in arranging food on the plate, to make use of the

clock system, the meat, for instance, at twelve o'clock, the peas at half-past six, etc.

Perhaps it is a far cry to finger bowls for they are not in general use in our schools. But our pupils should be told how to use them.

This is such a vast subject that it is impossible to scratch even the surface in the length of time given me for this paper but I hope I have given an idea of what we are trying to do for the pupils at Overbrook.

SECTIONAL MEETING — DORMITORY MANAGEMENT AND MEETING OF THE SUPERINTENDENT'S WIVES

WEDNESDAY MORNING, JUNE 26—9:00 TO 12:00 O'CLOCK

ELDA M. BARNES Ohio, Chairman

"TO WHAT EXTENT SHOULD A MATRON ACT AS AN ADVISOR AND SUPERVISOR"

ELDA M. BARNES
Ohio

Probably no other person in a residential school is brought so closely in contact with the children at all times, as that of the Matron. Her position is much as a Mother's in a well organized home. She has to secure the children's cooperation in the conduct of family life and delegate to them as much responsibility as possible.

Because of her daily associations with the children, the Matron, in loco parentis, exerts an influence which will carry thru the whole life of the child.

It is important that the Matron gain the children's confidence and good-will when they enter school in order to advise and guide them in their daily habits and conduct. To aid her in gaining this confidence, the Matron should study the case history of each child before he enters school.

A child leaving his home and parental influence for the first time needs this careful sympathetic guidance.

Homesickness is real. Fear of new surroundings often make him unhappy. For instance, John is assigned a room with several other children of similar age but of different personality and home training. His home training has been very meager. The physical conditions of his home are poor and he is one of a large family of children, consequently very little attention has been given to him. He is noisy and careless with his playthings.

Henry, another roommate, comes from a well-regulated home. He has been trained to share things with others; to be altruistic in his thinking.

James, his third roommate is an only child with over-indulgent parents. He is selfish. His parents have showered him with attention. He has never played with other children or shared his toys and room. He is a careless and irresponsible child; allowed to eat when he pleases; has no regular hours for sleep and is indifferent to the care of his room. In short, he has become a typical introvert.

Now he must learn to arise at a certain time and report promptly for meals and school activities.

He must also help take care of his room. Perhaps he dislikes this new routine. Thus, it is the Matron's duty in his play and leisure time activities to explain and show to him that many things we do are done in association with others.

It is her job to compromise these contradictory personalities. Adjustments may be necessary in this room group in order to help the children develop this so-called "get along ability".

Nine year old Susan comes to school for the first time. Her parents have not recognized the fact that she is nine years old. They still think of her as a six year old child. Her mother dresses her, combs her hair and takes care of her clothing. This has caused Susan to be a timid and backward child without any self reliance. Entering school at this age, she is associated with smaller children which only increases her shyness. Thus the over-indulgent parent has added a social handicap to her physical one.

To overcome this backwardness and help her develop a pride in herself, the Matron must teach Susan how to assume responsibility; how to care for her personal appearance and how to keep her clothing properly arranged in the lockers provided for each child.

As a result of all this guidance, the pupils should become a happy, interested group of children without resentment toward their new environment.

To establish high standards of conduct, each child will need to have respect and consideration for the rights of others. This will involve a practice of self-control and an application of those courtesies accepted by the better societies everywhere.

Dining Room manners require a certain amount of self-discipline. No doubt, it would be easier to eat a whole slice of bread at once instead of breaking it into pieces. Perhaps the child may get greater satisfaction drinking his soup from the bowl with all the accompanying noises than using a spoon. But how embarrassed he will become later when he is invited to eat at some social function. Here again, the Matron plays an important part in the supervision of the children.

In the dormitory, quiet should be observed during the hour for evening study. After the retiring bell rings, quiet again should prevail in order not to infringe upon the sleep and rest of other children. These quiet periods will stimulate a feeling ing of self-control.

That day is past when a Matron's duties consist only of supervising the personal cleanliness of the child such as, washing the face, hands and ears.

If the residential schools are to fulfill their duty of developing the whole child, then the Matron must become a counselor and advisor for the children in much the same respect as the true mother does in the better type of home. She must assume the responsibility of directing their social, moral and educational progress.

"IS IT ADVISABLE TO HAVE BOYS AND GIRLS ASSIST WITH HOUSEHOLD DUTIES?"

SUPERINTENDENT WALTER L. DRYS
Arizona

Read by Miss L. Elizabeth Oberly, Principal Western Pennsylvania School for the Blind

I have been asked to prepare an answer to the question, "Is It Advisable to Have Boys and Girls Assist with Household Duties?" The question as originally stated touched also upon the matter of remuneration for such assistance. May I digress for a moment before I get under way, to say that my answer is emphatically "No" to any suggestion of pay for routine duties which the child should learn to regard as his share of the general responsibility, whether at home or at school. I do not believe in paying children, blind or sighted, for doing their

duty. I am, on the other hand, heartily in favor of paying for services not included in the daily routine, and believe we should provide opportunity for earning wherever possible. We do provide many such situations and wish more could be found. We also encourage our boys and girls to use their initiative in thinking up possibilities and finding jobs for themselves.

But to return to the question at hand: "Is it advisable to have boys and girls assist with household duties?", there is, in my opinion, but one answer and I would spell it not only with a capital "Y," but with a capital "E" and a capital "S."

In formulating my own policy, I have not been governed by such factors as the amount of work or expense involved, or the effect of such practice upon the domestic side of the institution. Perhaps this is not a diplomatic remark to make before a group whose concern is the domestic angle of institution life. But I am sure you will approve, even though you may not agree with all of my remarks, when I say that I have considered only the value of participation to the boys and girls themselves.

In line with this policy the children of O. S. B. are responsible for the following household tasks:

In their dormitories they have the care of their own quarters, beds, floors, clothing and toys. They take turns at cleaning halls, playrooms, sitting rooms and lavatories daily. They assist with the Saturday clean-up which includes polishing the floors, (the electric polisher is considered great fun); sorting laundry into brailled laundry baskets; using the vacuum cleaner on the rugs; occasionally polishing windows and similar tasks. Without some household duties, Saturday is a long day for those who do not go home, in spite of shopping, story hour at the Public Library and swimming at the "Y."

Dining room duties include: Scraping and gathering up dishes, which is the work of boys large enough to handle the cart; picking up silver—a job for younger boys; washing and drying dishes, usually done by girls, although the boys also have opportunities to learn to do this properly. Small boys and girls consider it a rare privilege to dry silver and the small butter dishes.

The children take turns at these tasks, schedules being so arranged that there is no conflict between dormitory and dining room duties. If a child expects to be absent from his dining room duty it is his responsibility to provide a substitute who must be "paid back" in kind.

The aforementioned are the usual tasks. However, on occasion a girl who has a light schedule or program may be assigned by a housemother or teacher to help supervise small beginners whose school day is shorter than that of the others and who are learning their way about or need to learn to play. Or, a boy who has more than the usual amount of free time—perhaps because his academic work is irregular—is assigned special duties such as delivering laundry or emptying a trash can at an odd hour when the regular service fails to meet a special need. Such a boy is often given some "orderly" duty in the infirmary, and carries trays and supplies to the infirmary. Such tasks are performed cheerfully and often bolster up the morale of a lad who is backward in school, who needs a chance to feel important elsewhere.

Our reasons for assigning these household duties to our children have nothing to do with school economy, for I do not believe in capitalizing in any way in the work they do. It could be done by others more quickly and efficiently with little or no additional help (staff)—since all such work requires instruction and adequate supervision if it is to have any value as training, and I am convinced that it does have a high degree of educational value because:

1. It affords additional hand training for hands which need as many varieties of training as can be provided.

2. It teaches children to accept and follow out directions.

3. By working regularly with others they learn to cooperate.

4. Members of a dormitory group, as of a home, need to develop a sense of responsibility toward and a pride in their surroundings. These children develop a definite feeling of pride in the appearance of their living quarters. They learn to perform quickly, efficiently, and as a matter of course, the many small everyday tasks which few, if any, of our students will be able to afford to have done for them when they are out of school.

5. Such training often enables our students to economize by doing "light housekeeping" when starting to work for themselves or while attending college, and may even provide a job. One of our totally blind boys earned a goodly part of his room and board at the Student "Co-op" of the State University by washing dishes. Another, with a minimum amount of vision, earned his board by washing dishes at a hotel during his first year at college. Neither lad would have been able to do the work or would have considered such employment if he had not had experience in his earlier school life.

6. Students, particularly girls, who have lived in an orderly fashion and have learned how to maintain such order, will have higher standards of living when they establish their own homes. Sometimes they carry these standards into the homes of their parents as well.

7. Their training for participation in home life makes our boys and girls more acceptable members of society. Even those who will never be successful, in that they are unable to cope with the world or be self-sustaining, will be less of a burden to those who care for them, or with whom they live, because of these accomplishments. To those who are successful, independent and self-supporting, what an asset is the ability to do well so many of the things done by the normally sighted individual.

8. By no means the least of the reasons for pupil participation in household tasks while in school is the psychological effect of feeling that one is a part of a working organization—real training for citizenship. Sharing the responsibility for keeping the organization running smoothly should and, I believe, does lessen the tendency toward the "gim-me" attitude. This attitude is so easily acquired in an institution, where everything is provided for the students, and where so much is, of necessity, done for them—a state of affairs which too often results in the feeling that "The world owes me a living."

Each of us has served his apprenticeship at home tasks—as varied as were our circumstances. The home provided food, shelter, care, and certain pleasures. We earned our place in the home by doing whatever part we were able of the home duties—chores, kindling, errands, keeping our rooms neat, picking up after ourselves, dishes, hoeing in the garden, mowing the lawn, picking fruit, et cetera, et cetera, ad infinitum!

The child in a boarding school is deprived of some of these duties—I almost said "privileges." If we are to keep the situation from becoming altogether artificial and unrelated to living in the world he will enter when he leaves the school, we must provide some natural situations which tie up with normal living. A visual handicap does not excuse and should not deprive a child of his right to be a part and play a part in the group in which he lives—to make his contribution.

All of us who have spent much time in work for the blind have heard it said, and, perhaps, have said ourselves, Those who are without sight do not want charity. What they want is an opportunity to be like other people, to do the things others do. Their plea is, "Give us a chance." And where, I ask, ought they have a better chance to learn to be like others and do the things expected of members of any well-regulated home, than in the school which replaces the home for the major portion of their formative years? It is, unfortunately, quite unlikely that the visually handicapped child will learn anything

at home about responsibility, cooperation, or participation, or that he will be allowed to perform even the simplest tasks, except in the few rare instances where parents are wise enough to put the child's good ahead of their own protective or sheltering impulse. How many parents have you known who would permit a blind child to do the things he was capable of doing, to say nothing of teaching him or encouraging him to do them, or to assume responsibility, or develop right attitudes? We cannot blame the parents, for most of them simply do not know what the child can do or how to teach him. It is therefore up to us, who know both "how" and "why," to accept the responsibility and do our best to help our boys and girls develop into happy, useful, well-rounded individuals. They can then make a very definite start toward showing the world that they are like other people by first convincing their home folks that they are not helpless and hopeless, that they can do their natural part. (And they will have to do some fairly strenuous convincing!) But the admiration and respect of their families and friends will make all the tasks they have performed well worth-while.

The boy or girl who has been proud to accept his share of responsibility for daily tasks while at school will be prepared for citizenship in the larger sense. He will be glad to assume his share of responsibility for the good of his community instead of considering himself the responsibility of the community.

SECTIONAL MEETING — ENGLISH
JUNIOR AND SENIOR HIGH SCHOOLS

WEDNESDAY MORNING, JUNE 26—9:00 TO 12:00 O'CLOCK

CAROLINE HEIDEL, Idaho, Chairman

"THE IMPORTANCE OF SPEECH EDUCATION IN SCHOOLS FOR THE BLIND"

MRS. SINA V. WATERHOUSE
Perkins, Watertown, Mass.

As a basis for our discussion of the importance of speech education we might consider these three questions. Is disordered or inadequate speech a handicap? Is good speech a real asset? Is there educational value in speech training?

The importance of the education or training of a skill is determined by the practical or esthetic values of the particular skill. No one can reasonably question the importance of speech. Next to thought it is the most active of all our voluntary functions. There are in fact schools of psychology that hold that activity of the speech musculature is simultaneous with thought. It is more than a vehicle for thought, it is an aid and stimulus. The spoken word is as utilitarian as the proverbial spade, yet it can be as beautiful as music, capable of expressing man's simplest wants and highest hopes and aspirations. Not all may create or even understand music, but speech is within the ken and compass of us all. Indeed it is so precious, but so universal that we take it for granted much as we do most of the good things of life.

But things can and do happen to mar the order of these essentials, and speech is no exception. When speech is impaired we no longer take it for granted because we are inconvenienced, handicapped or even made to suffer by its inability to serve us as we wish it to.

The causes of impaired or disordered speech are many and varied, and the con-

sequences are equally numerous and complex. Speech disorders are classified according to cause, as organic and functional disorders. Organic speech defects are those caused by some definite organic disturbance such as lesions resulting from disease or injury, or any other abnormal condition of organs affecting speech. These conditions vary in severity from the destruction of certain brain areas to a number of oral defects such as dental malocclusion and highly arched palate.

The first step in therapy is to remedy the organic difficulties but when this cannot be done, re-education of the speech mechanism is necessary. Correction of organic injury or malformation must be done by a physician or dentist. After the dental or surgical work is done it is usually necessary for speech training to follow to aid in making the necessary adjustments.

Functional disorders of speech are not due to physical or organic defects but to the improper functioning of some part or parts of the speech mechanism, or to some abnormal action which affects speech. Mental diseases and even slight emotional disturbances such as hysteria, feelings of inferiority, and infantile attitudes may result in speech problems such as mutism, stuttering, and baby talk, all of which are functional speech disorders.

Of course not all of the functional disorders are due to emotional problems. Many are caused through incorrect use of the tongue or lips in forming sounds. This is usually the result of failure to learn the correct placement for sound formation during the speech development period of early childhood.

Both organic and functional disorders range in severity from complete absence of speech to merely indistinct or slovenly talking. Children with complete lack of speech are rarely found in schools as the organic or functional causal factors are very severe and complex requiring special medical or psychological treatment. However, children with practically unintelligible speech frequently do enter school.

The most common speech disorders among school children are the numerous dyslalias which include sound and letter substitutions, infantile perseveration and foreign language accents; and dysphemia which covers nervous disorders such as stuttering.

How do these speech defects handicap a child? In school they are an educational handicap since achievement is measured largely by his oral responses. He is usually credited with knowing only what he expresses, and when his chief means of expression is impaired he is obviously at a disadvantage. Oral expression is an aid to learning since it clarifies thought. The youngster with impaired speech is deprived to a large extent of this valuable and satisfying means of progress. This loss may be partially compensated for by written work in the classroom, but not in life, and what a sorry solution of the problem from the standpoint of mental health.

The girl or boy with inadequate speech feels himself the exceptional member of his group which frequently results in feelings of inferiority and other emotional difficulties. Such added strain further hampers school progress.

We cannot, of course, lift the handicap of blindness from the girls and boys in our schools, but surely we recognize the need for removing or alleviating all other disabilities. It was on this principle that Speech Therapy was introduced at Perkins in 1923 and has been continued and extended. Speech tests have been given in at least four eastern schools for the blind and the results show a very high percentage of speech disorders among their pupils. This does not imply a necessary correlation between blindness and inadequate speech. There are other factors that enter in, such as malnutrition, other inadequate physical conditions, and non-English-speaking backgrounds. Although foreign language difficulties are not, strictly speaking, speech disorders, they are nevertheless treated as such since correction is necessary. We have found in a few cases that blindness has been a causal factor.

The important facts for us to deal with are, that many blind children have poor speech, that such speech is an additional handicap, and as such should be removed whenever possible. Many speech defects can be completely overcome and most of the others greatly alleviated with proper therapy.

As to methods employed in speech correction, it is well to remember that no one school or person can offer an infallible system. Colleges and universities in all sections of the country offer excellent courses in speech training. Some schools cater particularly to summer students. If a school for the blind is too small or too poor to justify a full-time speech teacher, some member of the faculty might be trained for the work, preferably one who is experienced in teaching younger children since most of the work will be with the little ones. The speech teacher requires a sound background in psychology and mental hygiene, and a knowledge of speech anatomy and mechanics.

The more serious speech cases need individual attention in frequent short periods, while the less difficult may very well be organized into small groups.

Since disordered speech is a serious handicap the work in therapy ought to have first consideration, but good speech being a real asset, other types of speech training ought certainly to have an important place on the school program. Obviously the ability to do anything well is of great value, especially anything as useful as speech. Since speech cannot be standardized the phrase "good speech" is rather flexible, and we may say that good speech is effective, beautiful or interesting. Anyone who can speak beautifully, effectively and interestingly is master of a most coveted social grace. The blind stand in need of every possible social asset.

Speech training can be of practical vocational value. Blindness is probably less of a handicap in the field of speech than in any other activity. Successful blind lecturers, radio and platform entertainers, and tellers of stories for children are to be found throughout the country and indicate that this type of work is practicable. There are doubtless more opportunities in radio than our schools have yet uncovered. The field merits serious investigation. Radio entertainment experts say that radio drama is peculiarly adapted to blind writers and actors because its appeal is auditory rather than visual. Occasionally we find among our pupils humorous or otherwise appealing mimics and character actors. These youthful abilities might be worth capitalizing. Speech education itself can use well-trained blind persons, particularly for the work in correction. Of course the number of persons qualified to do professional speech work is limited, but the field is worth working for the capable few. Speech correction might well be done in all types of schools, hospital speech-clinics or free-lance work. All therapeutic work should be done in consultation with a physician.

In addition to improved speech, definite educational benefits accrue to pupils from speech training. And these are particularly valuable to blind boys and girls. Among them we might note: poise and self-confidence, vocal and facial animation, and improved posture. The plays, poetry, stories, monologues, etc., used in speech activities stimulate thought and imagination. It is practical and interesting to correlate the study of poetry in English classes with speech projects such as verse-speaking choirs.

Since speech disorders are a burdensome handicap, it is the duty of schools for the blind to remove them. Since good speech is a definite social asset and can be of practical vocational value, speech education ought to have an important place in all our schools.

"DRAMATICS IN THE OKLAHOMA SCHOOL FOR THE BLIND"

MISS MAURICE NORTON
Oklahoma

From actual experiences, from other papers and discussions, we all know that dramatics is valuable in the development of poise, self-confidence, grace, ease, and good posture and the elimination of mannerisms. It is one of the most pleasant ways of learning how sighted people act and react to situations. It gives the actors a chance to be some one else, an experience which everyone enjoys. To the blind it opens a new field of creative expression. Heretofore music in all its forms gave our blind pupils the greatest opportunity for self-expression. But all did not take part because of lack of ability. In dramatics everyone can participate even to the child with a speech defect who may only carry a sword on and off the stage, and who never says a word.

At the Oklahoma School for the Blind, training in Spoken English is given to practically every pupil in school. The course, conducted on a plan similar to most public school music courses, is designed to enlarge the field of the child's experience and appreciation and to give him practical aid in oral expression, using both interpretive and original material. Choric readings provide opportunity for both group and solo performances. Dramatics is a vital part of this course. The plan is to have one play for each class or combination of classes during the year. My motto might be "A play for everyone and everyone in a play." Ten plays were given last year. Most of these were not open to the public, but were for the entertainment of the student body.

Creative expression is seen in every phase of our plays. If the play is already written and if the characters fit the class, the stage setting, the names, the nationality, and therefore the dialect may be changed. If the play does not have the correct number of characters, new ones are added. These characters usually have as much personality, individuality and importance to the play as those already there.

Costuming, so important to both actors and audience, is a field of self expression. The selecting, designing, and making of costumes is left entirely up to the individual, unless he asks for assistance.

If the play is entirely original, one or two pupils, or sometimes the whole class collaborate to write the script, which is subject to changes when practice begins. A group of high school boys presented an original musical comedy in three acts this year. The scene was laid in a radio broadcasting studio, giving the boys an opportunity to mimic radio stars or to display original talent. The script was not written down to be memorized verbatim, but the thought to be expressed and the general characterization was understood by the participants. In this way the actors wrote their own parts, changing them occasionally to give a more life-like atmosphere. This play gave many of the boys an opportunity to show their musical ability and originality.

The high school girls gave a minstrel show on somewhat the same plan. They revised and added to a prepared play.

Our original plays do not stop with the high school group, but are used even more successfully and extensively in the grades. The pre-primary grade delights in dramatizing poetry and stories. They are not so successful in creating a play that will interest others.

The fourth grade entered into the study of creative dramatics with "The Elves and the Shoemaker." The theme was old, of course, but the dialogue was new and modern, many expressions coming from the radio and some from comic strips. Because the group was large and very enthusiastic, many scenes and new characters were added. The method of expressing a certain thought and not that of reciting a prepared script was used in this play as in the boys'

musical comedy. The response to this type of expression was so good that each practice was like watching a new play.

Another project was an original circus play in costume. The story was of a runaway boy who wanted to become a lion trainer. He had to work so hard with the circus that he was happy to return home with his mother and to promise never to run away again. Interludes in the play showed the performances of elephants, monkeys, wild men, strong men, trapeze artists and the ringmaster. Besides the dialogue—costumes, equipment, and stunts for the animals had to be prepared. The duties were divided and each child was given an opportunity to contribute something to the production.

Spontaneous dramatics was used at a series of Girl Scout meetings. In this type of production, the girls were told the names, ages, and relationships of characters, and were given five minutes to produce a one-act play. The results were very successful, but not very serious.

The most pretentious dramatic production of our school year is our annual presentation of Henry Van Dyke's famous story, "The Other Wise Man." This performance has become our traditional Christmas celebration, and judging by the increasing number who join our audience each year, it is becoming an integral part of Christmas for the people of Muskogee.

The entertainment opens with antiphonal singing and a processional by a vested choir. Between acts, Christmas carols are sung by the school and audience.

Two stage settings for this play have been prepared by professionals and are stored from year to year. An effort has been made to create costumes which are authentic as well as colorful. Lighting effects and make-up are changed as occasion demands and as we learn from experience. Pupils taking part in the play more than one year change the roles to be interpreted, so that any tendency for a routine performance is minimized.

We are particularly fortunate in having an adequate auditorium, a spacious stage with large anterooms on each side, with a connecting corridor. A beautiful blue velour curtain which is mechanically operated adds to the effectiveness of our efforts. We, of course, made use of the pipe organ, the grand piano, and the radio which are a part of our auditorium equipment. Overhead lights, footlights, and electric outlets for special lights are available.

Cooperation of the departments of woodwork, home economics, and music, the advice and help of the engineer and electrician, and the general maintenance corps are a vital part of our successful ventures. Needless to say, there would be no success without an encouraging support and sympathetic attitude on the part of our administrative officers.

In closing, may I reiterate that I find that dramatics is one of the best methods of creative expression for the blind; that the field is almost inexhaustible; that it is well worth the effort and the patience which it demands.

SECTIONAL MEETING — HOME ECONOMICS JUNIOR AND SENIOR HIGH SCHOOL

WEDNESDAY MORNING, JUNE 26—9:00 TO 12:00 O'CLOCK

LOIS V. COX, Maryland, Chairman

"HOW HOME ECONOMICS CAN BE INTEGRATED WITH OTHER SUBJECT MATTER IN ACCOMPLISHING THE DESIRED EDUCATIONAL AIMS"

LOIS V. COX
Maryland

I—Scope of home economics
- A. Changes in recent years
- B. Necessity for integration
- C. Trends
- D. Placement

II—Planning the course
- A. Making the individual the basis for the course
- B. Setting up educational aims

III—Integration with other subject matter
- A. Personal grooming
- B. Sewing
- C. Human relationship
- D. Cooking
- E. Home nursing
- F. Hobbies

IV—Evaluating student growth
- A. Accomplishment of aims
- B. Methods of improving course

The teacher of home economics today has a greater responsibility than ever before. The modern scientific movement, the machine era, and the feminism movement are making new demands upon her each year. She can no longer meet the demands of society by teaching just sewing and cooking. She must include in her course the study of foods and nutrition, clothing, child guidance and development, home furnishing, home management, home care of the sick, consumer buying, human relationships, and personality development. It is not enough for her to teach her pupils one or two skills, she must train them for citizenship. Such a course requires working with teachers of other subjects to effect desirable integration. Materials must be drawn from many fields to provide experiences for the child which will have permanent value and effect certain desired outcomes or educational aims.

Educators have realized that the home economics course must change to meet the needs of society, and they have been experimenting in many schools in all parts of the country. The results of these experiments have proved interesting and helpful. Home economics has been moving in the direction of:

1. Centering class experiences around actual personal, home, and community problems.

2. Giving pupils maximum responsibility for planning and carrying forward class projects.

3. Building more definitely on previous learning in school, home and community.

4. Obtaining help of parents in carrying out home projects.

5. Working with teachers of other subjects to effect desirable correlation.

6. Developing pupil-teacher partnership.

Home economics education begins in the home before the child enters school, for this is the period of adjustment to family life. It continues when the child enters the kindergarten and reads stories, sings songs, and plays games based on home and

family. Throughout the elementary grades, he studies about sources of food and clothing, building materials, fuels, and home and family life in this and other countries in his geography and history classes. He learns about domesticated animals, seeds, soil, heat, light, electricity, diet and digestion in his science classes. He learns to appreciate beauty of color and rhythm in his art and music classes; and he gets the fundamentals of arithmetic and language. All these studies form the basis of the organized home economics courses of the junior and senior high school. In junior and senior high school the child studies geography, history, science, government, music, languages, and mathematics. Each course attempts to give the student a knowledge of the subject matter included, but somewhere this subject matter must be seen in its relationship to family and community life. The home economics course seems to be an excellent place to bring about this integration.

Since the scope of the home economics course is so great, it is very important that each year's course be well planned. In states where there is a prescribed course of study to follow, the teacher must adapt the prescribed units to her classes and try to meet the needs of the individual pupils. Where there is no prescribed course of study, the teacher must make her own and budget her time to include all the necessary phases for each year. She must realize that children of the junior high school level—grades seven through nine—have a great desire to know how things are done and to imitate older people. In home economics classes they can find the opportunity to satisfy their desire for activity while learning to be more useful in the family group. In later high school years—grades ten through twelve—home economics can give the student a sense of achievement which he may not find elsewhere.

Realizing the needs of her junior and senior high school students, the teacher must next set up her educational aims and plan her program in such a way that she can accomplish these aims: to help the student to

1. Live happily in the home.

2. Understand the place of the home in personality development.

3. Accept responsibility for doing his share of the work.

4. Improve the health of the family.

5. Use the resources of the family—time, money and ability—wisely.

6. Prepare food and make necessary clothes and household furnishings.

7. Care for and help younger children.

8. Meet recreational needs.

9. Realize that social conditions are constantly changing and individuals must adjust themselves to these changes.

One of the first interests of a student who is beginning a course in home economics is personal care. This interest or need makes a unit on personal grooming appropriate for the first few weeks of the year. The pupils will know why they want to be more attractive and will be able to give their reasons, for example:

I—A girl or boy wants to be more attractive
- A. For the personal value.
- B. For the social value.

Next they will want to know how they can make themselves more attractive. We must be ready to help them with the answer.

II—They can make themselves more attractive through good habits of personal care in
- A—Health
  1. Good posture
  2. Well-kept hair
  3. Clean teeth
  4. Well-kept hands and nails
  5. Clear complexion
- B—Care of clothing
  1. Scientific laundering
  2. Careful mending
- C—Choice and use of cosmetics
  1. Selecting wisely
  2. Applying attractively

In developing this unit the teacher will find that the desire to be attractive finds its origin in the pupil's former training and experience; it must find its satisfaction in the home economics course and related courses. The related material may be offered by the home economics teacher, may be taught as a special course in related arts and sciences or may be taught in the social study and science classes through the cooperation of the other subject matter teachers. The last plan seems best, because it avoids unnecessary repetition. The courses related to this unit will be physical education and general science. Now is the time to enlist the cooperation of the physical education and science teachers in conferences for this purpose. Posture work is always emphasized in the physical education classes, but individual checkups and corrective exercises will not be amiss at this time. The science teacher can take this opportunity to review the health rules studied in previous classes and to do some laboratory work with soap, cosmetics, and the effect of heat on synthetic materials. Help may also be enlisted from outside the school. Often cosmetic companies will send representatives who are skilled in the choice and application of cosmetics to give demonstrations. Beauty schools will give becoming haircuts and waves at a very small cost. The actual laundering and mending of clothes will furnish the necessary activity and give the pupils practical training which they can begin to use immediately. When the unit is completed, the pupil will be anxious to see if he has improved in appearance for his personal satisfaction and if he seems more attractive to others.

A second unit could be on making a simple garment.

A. Characteristics
   1. Simple in design
   2. Easily laundered
   3. Inexpensive
   4. Attractive in color
   5. Durable

B. Material for garment
   1. Determining amount
      a. Use of tape measure
      b. Guide on pattern
   2. Kind of material
      a. Preferably cotton
      b. Fast color
      c. Becoming color and design

C. Use of pattern
   1. Markings
   2. Testing
   3. Altering
   4. Placing
   5. Cutting

D. Use of sewing machine
   1. Posture
   2. Threading
   3. Treadling
   4. Winding bobbin
   5. Stitching straight
   6. Testing stitch

E. Construction problems
   1. Markings
   2. Basting
   3. Darts
   4. Fitting
   5. Seams

This unit may at first appear to be strictly the work of the sewing teacher, but on closer examination we see that it involves arithmetic—the use of the tape measure and the material required, geography—the story of cotton, history—the story of the invention and improvement of the sewing machine, art—combinations of colors, and science—testing materials for fast colors. This will be a longer unit than the first, for the making of even a simple garment takes time. The finished garment will give the student the necessary sense of achievement, and wearing the garment will help carry on the first unit on attractiveness.

A third unit on human relationships may be introduced, while the pupils are working on their sewing. It is in answer to a definite need of 'teen age pupils. They not only want to be attractive to others, they also want to be popular. They soon learn that those who have charming manners are always most popular and they will ask for:

A. Everyday manners
   1. In school
      a. In the classroom
      b. In the halls
      c. In assemblies
      d. At club meetings
      e. On the playground
      f. In the dormitories
   2. At home
      a. Table manners
      b. Unselfishness
      c. Courtesy
      d. At the telephone
      e. Acknowledging invitations and gifts
      f. Appropriate dress
   3. In public places
      a. On the street
      b. In eating places
      c. In stores
      d. In church

B. Home responsibilities
   1. Care of own bedroom
   2. Care of own clothes
   3. Help in keeping house in order
   4. Help with meals
   5. Help with younger children

This unit is most important for our pupils, because they do not have the advantage that other pupils have of learning by observing others. They must know the right thing to do and have practice in doing it. The opportunities for practice are many, and the teachers of all classes, the supervisors, the housemothers, and the club leaders can cooperate in making the practice correct. A unit on letter writing in the English classes will help the pupils in acknowledging invitations and gifts. The English teacher can also be very helpful with correct speech and conversation for all occasions. Being sure of the right thing to do and say will give the pupils self-confidence and make them enjoy all social events more.

The fourth unit on the planning and preparation of meals is one which can be of great value to partially sighted pupils and to many totally blind ones. In many cases the pupils have wanted to help at home, but the parents have not been willing. Some parents feel that they have not time for the necessary instruction, and some think that a child who cannot see cannot help. When the child knows how to plan a meal, set a table, prepare a meal, and wash the dishes, it is much easier for him to convince his parents that he can help. This unit includes:

I Proper foods
   A. For children
   B. For adults
   C. For the sick

II How to serve
   A. Table setting
   B. Use of silver and linens
   C. Attractive serving
   D. Etiquette

III Preparation of meals
   A. Breakfast
   B. Dinner
   C. Supper
   D. School lunch

IV Dishwashing
   A. Clearing the table
   B. Rinsing and stacking dishes
   C. Washing, rinsing, and draining.

This unit calls for a study of the food needs of the body and the best way to meet these needs in the science class. It offers an opportunity to use the table etiquette studied in the previous unit, and it is an excellent unit for home project work. In the residential schools, it is harder to carry on home project work, but it is possible to get the cooperation of the parents for summer projects.

The fifth unit on home nursing and care of the sick is an essential part of every home making course.

I Safety precautions
   A. Prevent fires
   B. Prevent accidents

II Nursing
   A. Bedmaking
   B. Bath in bed
   C. Meals
   D. Medicine

III First Aid
- A. Cuts and bleeding
- B. Fainting
- C. Insect bites and ivy poisoning
- D. Sunburn
- E. Foreign bodies in the eye
- F. Indigestion

The civics course will be helpful in this unit with its lessons on home and community responsibilities. The hygiene and physiology course will give additional information on first aid; and demonstration in the homemaking classes will be necessary for the section on nursing. The safety council in your city may help with demonstrations of the right and wrong way to do things.

The sixth unit on hobbies will come at a time when the pupils are beginning to make plans for their leisure hours in the summer.

I. Leisure time activities
- A. Helping in the home
- B. Shopping
- C. Caring for younger children

II Hobbies
- A. Nature
- B. Collections
- C. Music
- D. Handcraft
- E. Sports

To some pupils there is a greater appeal in activities pertaining to the home than there is in hobbies on nature, sports, etc. These will find pleasure in making the home more attractive, making special treats for meals, doing the family shopping, and helping with younger children. Other pupils may not find helping at home sufficient for their leisure time. They will enjoy a hobby. If the teachers of nature, history, music, handcrafts, and sports show the pupils how they can make a hobby of each of these, they may want to begin a hobby and try to carry it on throughout the summer. Those who are going to help at home by shopping will like to work on consumer buying and visit neighborhood stores.

When the work planned for the year is completed a checkup is necessary for both pupils and teacher. The teacher must see whether or not her course has accomplished the desired educational aims and note how she can improve the course another year. Let us look again at the aims and the units. A pupil who has learned how to improve his appearance, make simple garments, do and say the right thing at the right time, cook simple meals, prevent fires and accidents and administer first aid, and to use his leisure time helping at home and working on a hobby should find that he:

1. Lives more happily at home.
2. Understands better the place of the home in personality development.
3. Can accept responsibility for doing his share of the work.
4. Can help improve the health of the family.
5. Can help use the family resources more wisely.
6. Can prepare food and make necessary clothing.
7. Can help with younger children.
8. Can find satisfactory recreation.
9. Realizes that he must adjust himself to social conditions.

The teacher may realize that she could have improved her units by using more illustrative material, by doing more laboratory work, by having frequent pupil checkups or by having more conferences with teachers of related subjects.

This course was one for beginners in home economics. The opportunities for integration increase each year as knowledge increases. To accumulate items of knowledge with the hope that somewhere, somehow they will gain significance and become an experience with permanent value is to waste time. The knowledge must, in home economics as in all other fields, be applied and integrated if it is to be useful in accomplishing the desired educational aims.

Bibliography

1. Needlework in Education—Theodora Graham, 1939, Longman Green and Co., N. Y.

2. Placement of Home Economics Content in Junior and Senior High Schools—Annie R. Dyer, 1972, Teachers College, Columbia University, N. Y.

3. Integration at Work—B. J. R. Stolper and Henry C. Fenn, 1939, Teachers College, Columbia University, N. Y.

4. Teaching in the Elementary School—Luella Cole, 1939, Farrar and Rinehart, Inc., N. Y.

5. The Principles of Teaching—H. C. Witherington, 1939, Prentice-Hall, Inc., N. Y.

6. Home Making and Home Economics, 1936, Board of Education of City of N. Y.

7. A Suggestive Guide for the Improvement of Instruction in Home Economics Area of Family Relationship—1939, John Callahan, State Superintendent.

8. Home Making—A Profession for Men and Women—Elizabeth and Forrester MacDonald, 1927, Marshall Jones Co., Boston, Mass.

9. The Teaching of Home Economics—Brown and Haley, 1928, Houghton Mifflin Co., N. Y.

10. School and Society—December 30, 1939.

11. Journal of Home Economics, February, 1940.

12. Home Making—Course of Study for Secondary Schools—Arizona.

13. Education for Home and Family Life—State Board for Vocational Education, Denver, Colorado.

14. Home Economics — Oakland Public Schools, Oakland, California.

15. Education—September, 1939.

16. Home Economics in General Education at the Secondary Level—Ivol Spafford, 1939, Burgess Publishing Co., Minneapolis, Minn.

17. The Cream of Beauty—H. Stanley Redgrove, Chemical Publishing Co., N. Y.

18. Food Study Manual—Ada Kennedy, 1927, The Manual Arts Press, Peoria, Ill.

19. Feeding the Family—M. S. Rose, 1931, The Macmillan Co., N. Y.

20. Food Purchasing for the Home—Blinks and Moore, 1930, J. B. Lippincott Co., Chicago, Ill.

21. Etiquette—The Blue Book of Social Usage, Emily Post.

DISCUSSION

DORIS E. FOSTER
New York State, School for the Blind, Batavia, New York

It is very difficult to add anything to such a complete and interesting paper as you have just heard given by Miss Cox. Every phase of the subject matter in Home Economics has been taken up and she has illustrated in definite concrete examples how Home Economics can be and should be integrated with other subject matter taught in our schools. After hearing this paper I feel that little, if anything, is left for me to add that has not been mentioned or completely explained.

However let us for a moment look at the subject of Home Economics as taught in our schools from the point of view or perhaps, we'll say, from the interpretation of the subject from the teachers of the other subject matter. In order to accomplish our aim isn't it important first to get the good will, interest and co-operation of these teachers? Many of us have found in our experience of discussing our work with the other teachers that they have no

definite knowledge of just what our aim is, or of what we are teaching. Isn't it true that many believe even today that we teach only cooking, sewing, dishwashing and perhaps some dusting? To them, with this opinion, our work is below the level of standard with the literary subjects and our only value is to help the subnormal pupil and those with extra time on their hands, and give them a chance to use their time or be occupied while the others are in their literary classes. It is very necessary in order to change this attitude which unconsciously is felt by the teachers and many of the pupils to draw together the Home Economics subject matter and other subject matter by integrating them so that, as a result, the teachers have a better understanding of our work and our aims. There are many ways this interest of the teachers may be obtained and thereby gain their cooperation as a result. The Home Economics department has excellent equipment and place to entertain socially the faculty and thereby demonstrate the work in certain phases done by the department. Faculty teas, formal dinners, card parties and other social events planned and executed by the pupils, show the teachers how great is the possibility of coordinating the work. You will remember Miss Cox brought out the fact of integrating English with Home Economics in the study of introductions, etc. Sometimes a play acted by the Home Economics pupils illustrating the importance of manners or proper food, or perhaps appropriate dress for certain occasions, may be given under the direction of the dramatics teacher. This means of illustrating many of the important phases of the work has been very successful in schools and has done much to show both teachers and pupils the work taught and the aim of all Home Economics teachers. Almost all the girls and many of the boys are interested in the different problems of living which they find themselves facing and we find some begging for instruction in proper dress, etiquette, care of clothes or the care of the hair as the case may be. Through this interest and study they learn how many of their other subjects enter in what they learn and so connect the two themselves. Some choose to write their composition or essay on a subject taken from their Home Economics courses and others find a particular delight in knowing the digestion of food or the food principles, etc., before the other pupils in the biology class who have not learned it previously in Home Economics class. As Miss Cox has illustrated, it is here the two courses should be integrated so that there will not be a repetition of the work with weeks or months between the time it is taken up in the two classes.

There is no doubt that the subject of Home Economics has a lot to offer in stimulating interest, supplying the practical value and aiding the instructors in accomplishing the desired educational aims when it is integrated with other subject matter.

"TEACHING DEVICES I HAVE FOUND HELPFUL IN PRESENTING FOODS, CLOTHING, FAMILY RELATIONSHIP, NUTRITION, AND CARE OF YOUNGER CHILDREN"

MRS. DORIS HORCH
Ohio

I think perhaps it is sometimes best to keep one's ideas in the background. I am referring to this topic. It was my idea, perhaps not an original one, but one which I believe to be invariably true, that a teacher gets most out of a meeting such as this when she gathers ideas which she can go home and put into practice. In other words, "a bag of tricks." And so being a new teacher for the blind I wanted

just such an experience from this meeting. So when this request came back "in my lap" so to speak, I still did not care to be outdone in my quest for help. Therefore the questionnaire which you people have so generously responded to. I am more than grateful for your response and helpfulness. And trust that I may be able to put together your ideas and a few of my own that I have found useful in my teaching experience.

First of all I wish to emphasize what many of you have said, that our problems with the blind are not so different from public school problems. Thinking public school home economists are working all the time, it seems to me, to find those devices, those methods, those testing procedures, the most efficient method of getting pupils to think and by so doing making their training a basic advancement in their everyday lives. When we get across the real meaning of home economics as being something besides just sewing and cooking we have accomplished a great deal. I'm sure we are all interested in the meeting now in session of the American Home Economics Association at Cleveland, Ohio. When we look over that program we find that home economists are working along many aspects of home and family life.

Now for the devices I have found helpful in presenting food. I like to think of the problem as, what do these particular girls need most? Is it actual preparation, is it nutrition, budgeting, or application in the girl's own home? First of all I think a teacher is charged with keeping herself up to date with present food markets and aspects, so that she may lead and pass on ideas and knowledge which she gains. I'm sure none of us can teach the same lesson with regard to shortening for example as was taught to us some time ago. The radio makes so many of these basic things sound attractive—just what basic thinking principles can we emphasize in our food work?

Meal planning it seems to me is our best procedure. We have many fine references and textbooks to help us with our foods planning. We use the Omnibus as our basic text for high school groups and Foods by Friend and Schultz as the basic junior high school text. The Omnibus covers seven of the basic units for home economics work. Miss Huston (now Mrs. Price) serves as an itinerate teacher trainer in Ohio. The tests that follow each unit are quite carefully worked out under the direction of Dr. Tyler now of Chicago University. These tests aim to get away from the essay type test. Also from the undesirable True-False test.

For a few of the equipment devices found successful. Several teachers mention the sets of measuring cups and spoons as being helpful. To me these are essential and a great time saver. Careful and systematic order and placement of equipment is necessary. Some device worked out as to how to read the oven regulator is necessary and will vary with the stove. Each girl in passing (what I call her practical test) must demonstrate to me that she knows how to light and set her own oven, what pieces of equipment she must use to measure the ingredients for a given recipe, and just what equipment she needs to assemble before beginning work. Each girl must in one way or another be able to pass this test.

Mrs. Hamblin of Oklahoma recommends the Buddy system (partially blind helping a totally blind girl). The totally blind must do the same work as her buddy. They are allowed some freedom in working out their own way of handling a situation. Teachers show them how, but if they can work out an easier way, a way better suited to their handicap, and can get the same results, then I feel they should be permitted to use their own methods.

Recipes were often mentioned. Shall we dictate recipes or expect the girls to look up recipes for themselves, learn them, or just how to work out this time-consuming problem? I like to use recipes from Braille as much as possible. Again the Omnibus has a good recipe section. We

have had this section put into Clear Type for our partially sighted girls. However I do think basic proportions and procedures must be learned, for example white sauce.

Nutrition. I was so glad to hear that one teacher is working with white rats for experimental purposes. (New York) and she refers to a very excellent book, "Teaching Nutrition to Boys and Girls," by Mary Swartz Rose. Miss Ord of California mentions the monthly weight and measurement by the medical staff as a means of checking up on nutrition and of correlation with the physical education work. In Ohio we are having charts made so that each girl can graphically see her own weight line.

This year we have especially tried to link up our food needs with our dining room meals. I ask the girls to write the menus served for a day and to check up on why it was necessary that they eat the variety of foods served. We score these meals. A good score card may be found in "Learning Exercises in Food and Nutrition" by Robinson and King. The girls often find that their score may be much improved by more carefully eating the variety of foods served and being more careful to overcome the "I don't like" habit.

Then I like to fill in what I think is a need for follow up work with foods. "How may I help my mother with the meal planning at home?" Basic factors that should be considered for my particular family, such as age, occupation, season, cost, variety and texture, flavor color shape and temperature are considered. My girls each planned what they thought would be an appropriate satisfactory week's menus for their own home.

Clothing. I have not taught clothing classes to the blind but I will be glad to pass on some of the excellent suggestions sent in to me. Again from Oklahoma textbook assignments outside of class are used. Garments are cut from commercial patterns. Several schools emphasize the use of a bulletin board. Certain garments are required and after that as many articles as they wish are constructed. Extra credit is given for additional work. As for equipment, hinged on rather than the standard foot is recommended. Girls are taught the use of guides for small hems and seams. Good hand work is required before machine work is assigned. From California emphasis is placed on the fact that the girls must sew on something that is desired by them. A sewing machine is always at the command of the girls in their building. Repairing personal wardrobe and remodeling dresses is a natural outcome of preliminary work. Calyx eye needles are used for plain sewing and darning needles for wool work. The wire loop needle threader has proved more satisfactory than any other threading device. Seam guides which are a part of the Singer equipment are used in the beginning to assist in learning how to follow a basting thread as a guide while stitching on machine. A finger guard is placed on the high powered electric machine.

From Indiana the report spoke of luncheon sets made to be used in the foods classes. From Iowa this interesting note: "After principles of design and color have been studied we discuss the line and color of dresses the girls are wearing, and try different colors on to find the most becoming. They also work on clothing budgets and make notebooks of different materials."

From Overbrook. Progressive steps beginning with the fourth grade are used. Each patch book contains every type and kind of hand and machine stitching. Pupils hem towels, ironing board covers, pot holders, laundry bags, etc. They progress to undergarments and then dresses. They select materials and clothing appropriate to the season. A fashion exhibit in the spring is held to show garments that have been made.

Miss Booth from New York state school says that each girl makes an inventory of her own underclothing and wash dresses, or some younger child, and works on the

project of replacing wornout garments and mending others. Included in this each girl learns colors that are most becoming to her and also styles. Application of all this to the pupil's own personal needs makes it more interesting to her and results in better cooperation. Budgeting for better shopping is practice. Hand sewing including the making of accessories is included.

There is one phase of the clothing problem which no doubt many of you are meeting that I think is worth mentioning. That is the selection of clothing. We find many of our girls buy from mail order houses. Principles of selecting and how to order is a worth-while step in our teaching of clothing.

At the Ohio school this year interest was worked up in a contest in making a design for our new kitchen and dining room curtains. Mrs. Cole of our department had the designs judged and the one selected which was to be used. I'm sure the girls took much more interest in the curtain project than if the design had been worked out for them.

Family relationships is an interesting unit to present. Several teachers mention splendid devices for making this unit functional. I like the idea of stressing this unit along with the social activities of the school. The American Home Economics Association a few years ago published several helps in presenting this unit. "Living Together in the Family" and "Pictures of Family Life" by Lemo Dennis Rockwood. A student guide is published suggesting material for class discussion. I think I like best of all in this unit to bring in some good book portraying fine family life. A few examples would be "Lantern in Her Hand" by Bess Streeter Aldrich, "Log Cabin Lady," author unknown. Dorothy Canfield Fisher's "The Homemaker" and "The Bent Twig" are a few suggestions and many others may supplement this unit.

The unit dealing with care of younger children is one that appeals to the girls. The problem of bathing, several mention use of the rubber doll. For feeding and nutrition we have a great chance to bring out how our high school pupils influence the younger children in their likes and dislikes for food. We plan a suitable luncheon and invite grade school children, noting their acceptance of various foods and their reactions. Clothing principles may correlate with the sewing department. Sleep, cleanliness, health, and habit formation are interesting topics. The high school girl seldom realizes how she influences younger children, and it is important that she do so, and as many ways of contacting younger children worked out as possible.

This past year my classes have enjoyed going to the first grade room once each week for work with the children in table etiquette, what foods we eat to build our bodies, how to make a bed, importance of controlling our voices, and several other topics.

This subject does not specifically call for the unit of home care of the sick, but I do feel it was one of our most successful units this year. We worked on diets, what to do in certain emergencies, and community health. The school nurse helped with a bathing in bed demonstration, simple bandaging, etc. This group gave a program on the Home Medicine Chest.

I am very much interested in the elementary program as some of you have spoken of and wish we had time to talk back and forth on some of these problems. However I believe it a separate problem in itself.

Again I wish to thank you for your help to me and I trust I have been able to pass on a few of your ideas so that others may gain as well as myself.

SECTIONAL MEETING — INDUSTRIAL ARTS

WEDNESDAY MORNING, JUNE 26—9:00 TO 12:00 O'CLOCK

LOIS I. CLIFFORD, Western Pennsylvania, Chairman

"UPON WHAT POINTS ARE WE JUSTIFIED IN JUDGING DESIRABLE INDUSTRIAL ACTIVITIES IN SCHOOLS FOR THE BLIND"

ROBERT MULLIGAN
New York State School for the Blind, Batavia, New York

A major contribution to schools for the Blind, was their establishment as a definite part of the educational systems of the several states. This change shows greater emphasis on preparation of youth for the common activities of life. The dominant interests seem to be that of a job. Many prefer to enter the professions, trades or commercial and electrical occupations. There seems to be a disagreement among school administrators regarding the permanence of these interests. The statistics of actual occupations followed by the Blind are so varied and so unrelated that no school would be justified in presenting a curriculum of vocational activities sufficient to prepare its pupils for them all.

The principle of equality implies that every person should be given the fullest possible opportunity for development and the use of his individual potentialities. Individuals differ, hence appropriate equality of opportunity requires differentiated educational treatment. This is more especially true in schools for the Blind, as the causes of blindness have a very marked influence on the individual. Although there are many pages written on this as a subject, there has been no pedagogical use made of these findings. I know of no tests which are applicable for use in rating vocational aptitude in schools for the Blind. A particular problem of the schools for the Blind, is in making provisions for individual differences of its pupils. Making this provision is increasingly difficult, because of the increasing scope of responsibility undertaken by the school, which limits the time of the pupil.

There are several ways of dealing with individual differences. One method has been to use certain courses (such as the industrial) as dumping grounds for inferior pupils. This makes easier the task of teaching academic subjects to the exceptionally capable. However the slower pupil is deprived of the development of understanding and appreciation of a broader range of facts and by the same method the exceptionally capable pupil is deprived of creative and constructive thinking and doing.

The purpose of the industrial department of the school seems important. This includes questions such as: why do we teach industrial activities; what are the advantages to the general welfare of the pupil; what is the objective of the department; what training is most worth while; should we be expected to offer complete preparation for living or are there some things beyond the scope of the school.

We have in the schools for the Blind, three groupings of boys, each of which must be considered separately. The first, the group who besides having visual defects have also serious mental limitations; the second, the normal adolescent youth who desires to create and construct those things which are vital to boy life; and third, those who at the age of from eighteen to twenty-six, have nearly completed high school work, or who have lost their sight recently and are anxious to acquire some trade or profession, by which they can secure a livelihood, wholly or in part. The justification for teaching a subject is found in the individual or group of

pupils to be taught. Since pupils differ in degree of ability, but live in the same world, their educational requirements should differ in quantity, scope and emphasis. The superior pupil should acquire his knowledge through his own searching, but the slower pupil will need more guidance.

Industrial activities have merit to the extent that they contribute to the training of the individual or group to which they are applied. We too often select a project for its commercial value, rather than for what it might contribute to the education of the pupil. It seems to me that the function of the Industrial department is educational rather than commercial and that projects for individuals are not as essential in our schools as group projects which would involve some of that quality known as school spirit.

In Batavia we have a project which may be considered under this classification, known as the "Boy's Supper Club." It has proved to have many apparent as well as underlying values: preparing cooking and serving food, washing dishes and putting away the equipment. These are not the only values in the club, as it also affords an incentive to construct such projects as tables, stools, cupboards, molding board, rolling pin and outdoor fire place. Probably its greatest contribution to the pupils is the social development which it provides them, through inviting friends of both sexes from within and outside the school to be guests of the club. These contacts with boys and girls, both sighted and blind, make for a normal social behavior, and the association with elders is particularly valuable, as a well laden table is a leveler of ages.

Desirable Industrial activities are those that contribute to the common good of a group; that give concrete application to ideas derived from curricular instruction; that render an outlet for expression of the normal adolescent youth and those that emphasize a broadening understanding of all occupations.

"ADVANTAGES AND DISADVANTAGES OF TRADES TRAINING IN SCHOOLS FOR THE BLIND"

FRANK J. ROZNOWSKI
Michigan School for the Blind

As the title suggests, so it is the purpose of this paper to point out some of the advantages and disadvantages in teaching trades to the children of the schools for the blind.

Ever since the establishment of the first asylums, schools and workshops for the blind, which was but little over a century ago, we certainly must admit that we have not progressed by leaps and bounds in finding new and more remunerative trades to teach our blind students. I need not name the trades that we are still teaching, for they surely must be familiar to all of us. While these trades may have been excellent "bread-winners" during the past century, we must begin to forge our way out of the backwoods to take a good look at the tremendous jump industry has taken in the last four decades, and try to make some pretense at catching up with it.

However, the purpose of this paper not to suggest new trades, I shall endeavor to get to the subject at hand.

Since we are still teaching many of the old-time trades, there must be some advantages to be derived from them by the student, so let us see what they might be.

1. Developing Manual Dexterity. As trades teacher, I think many of you have had the same experience as I have had with students who come to me having almost no use of their hands. Not to poke any fun at a former student, but there comes to mind a particular case where a graduate, who had had little trades training, took two days to learn how to work

a common padlock. Had this boy had much more trades training during his school career, I have no doubt that when his job called upon his ability to operate a padlock that the task might have been a simple matter. Of course, this is an extreme case of non-coordination of mind and manual ability.

Many blind children could have much more normal dexterity than they start out with if they were allowed to do things at home. Many of them don't know how to pound a nail, take a stitch in a broom, etc., because at home father was afraid that "sonny" would pound off the end of his finger, or mother was afraid that her little boy might run a needle clean through the finger if he were to play with needle and thread. If parents were to treat their blind progenies more normally, it would certainly be easier on the broomshop, shoe shop instructors and others.

2. Transfer of Training. This kind of an advantage to be derived from trades training is almost self-explanatory. However, for the sake of making clear what I mean, let me set up a simple hypothetical case.

We'll assume that a boy took some broomshop work and piano tuning while in school. After he has well established himself in some line of business, he gets married and builds a home. Suppose that after he has his yard properly landscaped, he decides that to keep the "little neighbor brats" from running all over his new lawn he must build some kind of a fence to stop them. We'll also assume that he hasn't followed one of the two trades he studied at school. Well, he goes out to buy wire for his fence. From the two trades he took up, he has a knowledge of different gauges of wire. It can readily be seen that when he gets to the hardware store he will immediately know what type of wire he wants without having to be shown several samples of wire.

A very simple illustration, but it shows how advantageous trades training can be in the transfer of knowledge and training in many life-after-school situations.

3. Small Classes. Rarely is a shop class in a school for the blind much larger than ten or twelve. In comparison to the shop classes in public schools, it can be readily seen that the blind pupil has a decided advantage in that he can be given more individual supervision. In a school for the blind the instructor can usually find time each day to give each individual some attention, whereas in the public school, the individual is extremely fortunate if he receives individual attention once a week.

4. Character and Personality Development. Trades can be of great advantage in developing the character and personality of a student. From well finished products he will build up self-pride; a trade can stimulate a general interest in things mechanical; trades can bring out a child's exploratory nature and a desire for greater insight into things about him; his sense of responsibility can be greatly developed; literary interests may be developed as well; he will undoubtedly learn to do things more methodically; they will increase a child's dependability. What child is there who isn't proud when someone praises or buys from him a well finished product of his own making. How quickly a child is ready to accept responsibility and endeavor to become more dependable when he knows that the school might want one of his brushes, one of his brooms, one of his doormats, or want him to tune one of the pianos to be used for some public function! Wouldn't a student derive more enjoyment if for an English class he could write an essay about the construction of a machine gun instead of attempting to describe a sunrise The foregoing traits and many others can certainly be brought out through training in trades.

5. Handcrafts for Leisure Time. With the advent of minimum working hours and maximum wage, the blind as well as the sighted find themselves with much more leisure time than they had during the three preceding decades of this country. The majority of sighted people can usually find something at which to busy themselves during these extra hours of leisure, but many times the blind person

is liable to go home and just sit and rock and listen to the radio.

Having had some training in various crafts, the blind person can put them to good use as do the sighted. They may be used to occupy the hand and mind and they have the added advantage of serving as a sideline to add to the home coffers.

6. Knowledge of Tools. How many students have much familiarity with the functions of a hammer, a chisel, pliers, knowing how to use a file correctly, etc.? Again the home could do a lot more to help the child. Then too you can see what an advantage the child has who receives some trades training over the one who does not receive any.

So much for the advantages to be derived from trades training. We have seen how green the grass can be if properly cared for.

Now let us climb over the fence and have a look at the grass that hasn't been so well taken care of. In other words, let's ferret out the disadvantages that exist in trades training as it is offered in our schools for the blind.

1. Poor Equipment. One of the most important factors in teaching trades is the possession of modern and good equipment. On this point many of our schools fall down miserably. Since most of the schools for the blind are unfortunate enough to have to depend solely upon the discretion of the State legislators for their money, the trades departments as well as many others find it necessary to work with machinery that has an age of from twenty-five to fifty years.

Much of the machinery in my particular shop has been in use since the early twenties and probably sometime before that. It stands to reason that this machinery cannot stand up forever.

Then too, much of the new machinery that we are able to get is very crudely constructed, and is made from the cheapest of materials.

It's no wonder that a student becomes highly discouraged when he has to stop work right in the middle of a broom, or a rug, or a brush to make adjustments on machinery that was badly constructed to begin with. We're not giving the student a fair chance when we force him to try to do good work with poor equipment.

We cannot blame the school administrative officials for this lack of equipment. So far the State legislatures have never been able to get it through their heads why institutions of our type have a great need for money.

It would be time well spent if our so-called representatives would throw away their cigars put on workman's apparel and actually take a genuine inspection tour of our schools with the idea in mind to find out just how they might help us.

2. Over-emphasis of Literature and Music. Up to approximately the latter half of the past decade, we have been attempting to make journalists, musicians, poets, authors, playwrights etc. out of the blind youths that have passed through our schools. How successful have we been in this attempt? There are a few who have become what they set out to be, but, this small group is far overshadowed by the group who have not become what they were advised to try to become.

In other words, we have emphasized the academic side of education too strongly. We have endeavored to show that our blind could be scholarly gentlemen the same as the sighted, but what has it gotten many of them? Do not misunderstand however, for I am an ardent advocate of a college education for those to whom it can possibly be of some benefit.

This particular disadvantage brings to mind a point or two that will be of advantage to students in years to come. Namely, there is a movement on foot in Michigan to ascertain more fully the needs of each individual and then to set up a plan which will be especially adapted to the fulfillment of his educational needs. This plan is set into operation after the

individual has passed through the regular ground work of the first six primary grades. Such a plan will allow the individual to take all the time he needs for the completion of his junior and senior high school training.

Closely allied with the plan just mentioned, is the work of our visiting teacher. It is his duty to find the resources of the community and how its blind young member who is now in school can have a place for himself when the time comes for him to return to his community to make his living. So now you can see that the trades are beginning to be raised on a pedestal equal in height or higher than the pedestal on which the literary values of education have been resting for so long.

3. Impracticability of Trades Now Taught. How many of the trades now taught can we say are really practical to the blind youth who must someday graduate and begin to earn his bread, In my mind there are two trades that have practical value to the blind child; namely, they are piano tuning and shoe repairing. You may have your doubts about the practicability of the latter, but I see no reason why it cannot be so. It's a trade that's being worked at, maybe by only a few, but nevertheless it can be successfully carried on if there are available funds.

How practical are we being when we encourage a child toward the establishment or uniting with a broomshop upon graduation? The stipend received from broomshop, rug factory, mat making establishment, etc., would probably be no larger than that made possible by blind pensions, thus encouraging the latter. Our methods are so far behind the sighted that I don't see how we can possibly expect to set up fair competition.

4. Financial Insufficiency. How many blind graduates have sufficient means with which to establish a business when they leave school? Not very many, it is certain. It would be extremely beneficial if some kind of a national or state or private fund could be established from which a blind graduate could borrow the essential amount of money to set up a business. I believe there are some such funds in existence, but none of them large enough to do any real good. It is this financial insufficiency that thwarts the ambitions of many of our graduates when they are thrown into the world.

Before concluding this dissertation, I should like to quote some portions of a letter which I recently received from Mr. Joseph F. Clunk, Supervisor of Service for the Blind, Federal Security Agency, Washington, D. C. Some of the ideas in this letter are repetitions of things that have already been set forth here, but all the same, I feel that what Mr. Clunk has to say is very worthy of being quoted.

He speaks of the disadvantages in trades training by saying:

"1. Children are not taught to work quickly and accurately in schools for the blind. They are permitted to move methodically and too leisurely.

2. Articles made, usually are not practical in the commercial field. Manual work ought to be elevated to a higher level."

About advantages he says: "A student could be taught coordinated, rhythmic motion. the value of time as measured by production. He could also be taught the use of factory production processes. Measurement of the student's ability against that of the industrial worker will give the capable student more confidence based upon knowledge, and it will enable the placement officer to more intelligently measure the manual dexterity of the pupil and to place him more properly after graduation. Very few graduates of schools earn a living as executives or purely through mental activity. There should be as much emphasis placed upon shop work and its value as upon the literary subjects."

In conclusion then, let's see what we can do for the blind child in getting him started properly. We can serve him: 1. By the adoption of courses of study that are flexible but definite. 2. By drawing a sharp line of demarcation between the normal and abnormal blind children; 3. By

providing very specific training to follow the general training that should be provided for every child capable of profiting by it, thus securing "the value during education of the life-career motive"; 4. By combining wherever possible the advantage of the residential school with schools for the more advanced technical and professional training of young people with sight.

So that we can have some idea of the kind of employees our graduates will be, we should know if the temperament is mental or manual, directive or dependent, original or imitative, social or self-centered, an indoor or outdoor type, of large or small scope, accurate or inaccurate, rapid or slow to coordinate facts.

In conclusion then let me sum up briefly the advantages of trades training: 1. Acquisition of manual dexterity; 2. Transfer of training; 3. Small classes; 4. Character and personality developments; 5 Crafts for use in leisure time; 6. Knowledge of tools and their use.

And among the disadvantages we have: 1. Poor equipment; 2. Over-emphasis of Literature and Music, 3. Impracticability of most trades now taught. 4. Financial insufficiency.

I would rather see a boy on a farm who can split wood because of the trades training he was given in school than I would to see him doing nothing at all for not having had any trades training.

"WHAT MATERIAL VALUE IS INDUSTRIAL ARTS INSTRUCTION TO THE MASS OF BLIND YOUTH UNDER THE PRESENT BLIND RELIEF SYSTEM"

VIOLET M. BUSHAN
New Mexico School for the Blind

Those of us who teach handicrafts in schools for the blind like to feel, that because of the training which the pupil receives in our departments, he or she will fit better into the life of the community. Many of us feel that it is more important to teach the pupil to use his hands, and to help him to master certain fundamental processes, than to allow him to make one article over and over until he acquires a maximum of speed and perfection. Often, however, his ability to make one article may be of more practical value after he leaves school than all the rest of the instruction which he received.

The last decade with its lessening of economic opportunities has made it more difficult not only for the blind but also for the sighted youth leaving school and entering the business world to find a suitable place. The sighted person, however, has everything in his favor in his attempt to locate a position, for he not only does not have to cope with the handicap of blindness, but he has at his command all the resources which have been built up by the community to help him in finding a job. As a rule in large towns or cities the person who wants work does not go directly to the prospective employer. He may go either to the free employment agency which is a part of the social service program in many cities, or he may apply to a commercial employment agency. These organizations do not, of course, place all their applicants, but the people who run them are trained job hunters, and for this reason they are more likely to know of an opportunity if it exists than is the individual who tries to find work unassisted.

Now let us discuss the assistance which the average community offers the blind boy or girl who completes a given course of training and is ready for placement. It is obvious that, if they are to be successful, the blind are far more in need of help at this time than are the seeing. In reality,

however, they usually get far less, for the agencies to which the seeing individual applies are not equipped to meet the problems of the blind, and they will not accept the application of a person who is thus handicapped. It is not my purpose to criticize the work which is being done by any person or organization, but in connection with the lack of employment opportunities, I should like to say something of Missouri's program for the blind. I have chosen this state for specific reference simply because I am better acquainted with its provisions than with those of other states. You may know that Missouri's program for the adult blind has been seriously curtailed because of insufficient funds. Certain groups of the blind did not want the state to accept the social security program for the blind, and they succeeded in preventing its adoption. Because this state did not receive the money which would have come to it from the federal government under this program, the Work of the Missouri Commission for the Blind with the exception of that of the Pension Department was suspended. Even before these departments were closed last June, however, there was little organized effort to find work for the blind in the state. At one time the Commission had a person on its staff who devoted part-time to the work of placement, but this job was abolished several years ago because it was not felt to be practical. The state school for the blind has taken an active interest in placement of its pupils, and in many cases opportunities have been found by it, but the work done thus far in this direction by Missouri and most other states is only a drop in the bucket. Missouri has concentrated most of its efforts for the adult blind toward the building of a relief program, and in this respect it differs little from the other states. Many young blind people who are capable of becoming at least partially self-supporting must be content with a pension. Still others must enter homes for the blind. A third group receives various form of work-relief. If this is the best that the community has to offer the mass of our blind youth, then our schools should, instead of trying to teach independence, give some attention to teaching their pupils to become good relief clients, for that is what the majority will most certainly become unless organized effort is made to find employment opportunities.

Relief for the blind may be considered under two main heads: first, there is direct relief or money grants which are given to the needy blind. The state of Missouri gives a pension of $25 a month to the blind who are eligible. The second type of assistance to the blind may be referred to as work-relief. I am most interested in this latter classification, for it is in this type of relief that Industrial Arts instruction is often useful. As the name implies the person must produce some article or perform some service in return for the money which he receives.

Recently a considerable number of the blind have been employed by the W.P.A. on such projects as home teaching for the blind and braille transcribing, but the most important form of work-relief for the blind at this time is the sheltered industries. In a survey conducted by the American Foundation for the Blind in 1938 a total of 23,066 blind persons were found to be employed in sheltered industries in this country. This is a small percent of our total blind population which is estimated at between 130,000 and 260,000 persons, but the number thus employed is infinitely larger than the number that can be considered entirely self-supporting. Therefore, whether we like it or not, the vocational training which is of the most practical value to the mass of the blind youth at this time is that which fits them for work in one of the sheltered industries.

A large range of articles are made by the blind throughout the country, but the fundamental processes in the manufacture of most of these articles are taught in the Industrial Arts Departments of our schools for the blind. Some of the more common articles made in shops and homes for the blind are: brooms, mops, baskets, leather articles such as belts, various types of mats, woven rugs, etc. The workshop at Los

Angeles also makes mattresses and sleeping bags. The most interesting factory for the blind which I have seen is the dress factory in Toronto, Canada. It operates on a wholesale basis, and its equipment is that of any other modern establishment of this type. The cutters and salesmen are sighted, but all of the things which the blind can learn to do efficiently are done by them. The operators do their work on a piece-work basis, and as in the factories employing the sighted, only one part of the garment is made by each person. This Canadian factory, together with the other shops for the blind in that country, is self-supporting.

The feeling is growing in the United States that the shops here should also be run on the principles of good business rather than as charitable organizations. If this movement succeeds real vocational opportunities will be provided for young blind people with ability to do industrial work efficiently.

Great impetus was given to the growth of workshops for the blind by the passage of the Waggoner-O'Day Act in 1938. This bill provides that the federal government shall purchase certain blind-made goods which meet government specifications. Shortly after the enactment of this law National Industries was formed. It is a non-profit sales organization sponsored by the American Foundation for the Blind and set up to take care of the distribution of government orders to the various workshops for the blind. It is easy to see how significant this act may be for the blind. The government provides a large market, and the problem now seems to be to find workshops for the blind which have suitable equipment and high enough standards of work to enable them to make articles which meet government specifications. The following are some of the articles which the federal government will purchase from the blind: brooms, whisk-brooms, mops, cocoa mats, pillow cases, sanitary swabs, and deck swabs. Thus far the blind have been able to take care of only a small part of the government's needs.

At the present time the teacher of Industrial Arts is giving to the mass of the blind children most of the vocational training which they will ever use unless there is a marked growth in employment opportunities for the blind. Many of the articles made in the school shops are exactly the same as those made in the sheltered industries. In the New Mexico School for example our pupils make brooms, brushes, whisk-brooms, mops, door mats, and baskets. They are, of course taught the usual fundamentals of sewing, knitting, crocheting, etc., which are taught in other schools.

I wish to say in conclusion that the prospects for employment of the capable blind seem to me to be growing brighter, and I think that we have a right to feel optimistic with men like Mr. Clunk for leaders.

"THE VALUE OF HANDICRAFT FOR THE RETARDED BLIND"

FLORENCE ASH

Occupational Therapist, Royer-Greaves School for the Blind,

King of Prussia, Pennsylvania

The importance of this topic can best be understood if we pause for a moment to define just what is meant by the retarded blind, better known at the Royer-Greaves School as "the blind with an added handicap."

This group may be divided into three classes;—In the first or mentally handicapped class are found the spastic, the epileptic and those defective in muscular co-ordination.

In the second or physically handicapped class are found the cardiac, the deaf, the speech defective, the cripple, and those

defective in muscular coordination because of nutrition disorders with lack of muscle tone.

In the third or retarded class are found children, who, due to neglect or oversight on someone's part, have never had a chance to attend school or receive training of any kind.

Knowing that such children actually exist, just what is to be done for them? Should they be neglected and allowed to sit in a corner or should they be given a chance to become useful members of society?

Dr. Goodwin Watson, Professor of Education at Columbia University, says in his paper, "The Exceptional Child as a Neglected Resource": "The blind, deaf, crippled, mute, ill and mentally retarded are not liabilities just because there are tasks beyond their powers. There are tasks which might well be done in this world which are beyond the powers of the best of us but if we are sane, we do not therefore suppose we can contribute nothing. We are none of us ready to meet certain conceivable standards of usefulness but under proper encouragement we can contribute something. So can the exceptional child."

It was while teaching expression in one of the regular schools for the blind that Mrs. Greaves realized the great need of the blind child who "is different." She saw a group of "deviates either temporarily or only slightly retarded who should have been in a special school." Because of this, Mrs. Greaves founded the Royer-Greaves School nineteen years ago.

What is the Royer-Greaves School? The Royer-Greaves School is a home school for the blind child with an added handicap, a school for the blind child, who, because of additional handicaps, needs special care and training, a school for the blind child who is a misfit in a classroom with the normal blind child.

"The school provides a real home with its responsibilities, its social and religious life—all essential to a normal training for social fitness. As a means toward future happiness the school provides a definite school training."

The subjects are more or less linked together, each serving its purpose in helping to develop the physical and mental status of the child. Not the least important of these subjects is handicraft.

For the younger children, handwork is used primarily to develop fingers, fingers which have never been used and to all intent and purposes just do not exist.

Finger plays, clay modeling, the sand box, stringing beads and playing with blocks are all equally important for this purpose. Unknown to the child, flexion and extension of the fingers take place. In time fingers become stronger, steadier, and finally more normal while the child supposedly is playing. Concentration with coordination of the mind and fingers also increases.

At the same time group activities are carried on, which help to form the habits of cooperation, courtesy and readiness to play with one another.

In addition to these activities, the child is taught how to care for himself, particular stress being put on the art of dressing. It is here that the button and lacing frames play an important part in the curriculum.

Linking belts are next stressed. From the therapeutic angle, the value of making belts is most important. What other craft can give so much confidence to the child in so short a time? After finishing the first single link belt the child is both thrilled and delighted and more than eager to tackle harder and harder projects. The double link followed by the triple link belt is then mastered, giving the child more and more confidence at each step.

Because of the selling value of belts, this project can be used as a means for reaching a goal. Jimmie, one of our former pupils, purchased a fifty dollar loom with money earned from making and selling belts. He is now weaving five days a week, selling all the rugs he can make.

Weaving is another useful and helpful craft which gives a great deal of confidence to the child in addition to teaching accuracy and neatness.

Several large weavettes, three Structo looms, the Weaver's Friend and a table loom, operated by means of a rotating bar at the top of the loom, are used at the school.

The weavette is used primarily for strengthening and developing fingers. It also is used to acquaint the pupil with the simple over and under weave.

Before any one is permitted to operate the loom, the different parts are described, while the child is encouraged to touch and examine each part. The winding and threading of the warp are discussed and then the pupil is taught how to operate a loom.

The looms are warped with wool, linen or carpet warp and woven with wool, linen, rag, chenille, roving, etc. In this way the child has an opportunity to weave with different kinds of material, learning how to gauge the tension of each. We have comparatively little trouble with broken threads. Straight edges and even weaving are required from everyone working on the looms.

The importance of accuracy is stressed not only with weaving but also with all the crafts. The pupils soon learn that articles must be made perfectly with as little assistance as possible. Our pupils are made to realize that the public should not be forced into buying articles simply because they are "Blind Made."

Upon admission to the school, Mary, an infantile paralysis victim, had no motion in her right hand and arm. She was depressed, listless and showed little interest in things about her. Stressing the use of the right hand while making pot holders on the weavette and operating the loom with the rotating bar, has given her confidence and restored partial use of this paralytic hand and arm. Mary's mental attitude has changed and her interest in other subjects has become quite marked. At present she makes belts, laces wallets, is learning to knit and weaves baskets.

Basketry has many useful purposes for the blind child with an added handicap. The simple, pairing, triple weaves, the combinations of these weaves, the different sizes of spokes and weavers and the different types of borders all add to the great possibilities, usefulness and therapeutic value of this craft.

Training the child to weave baskets with the fine weavers and gradually substituting the coarse weavers "trains the hands, strengthens and brings dexterity to the fingers and forces co-ordination of mind and muscle, making the hands quick to obey mental commands."

Basketry is excellent for concentration, holding the child's interest from beginning to end, furnishes exercise for almost every part of the upper extremities and helps to give the child some means of earning money .

Baskets, covered jars, stools and other types of basketry are salable if made properly and correctly. Care, accuracy and neatness are essential.

Basketry is a splendid preliminary to caneing or can be taught in connection with caneing. Both are not difficult arts, yet very practical and useful.

What can chair caneing offer the blind child with an added handicap? There are seven steps. Each step must be completed correctly before the next step is started. Accuracy, concentration, patience, co-ordination of the mental and motor activities, exercise for almost every part of the upper extremities are developed. We have found that caneing offers an opportunity for the individual to find placement in workshops for the blind.

All these crafts and others too numerous to mention offer the blind child with an added handicap, an opportunity to make him realize what he can do. The child is made to feel that he has accomplished something. Each child, however, must be

treated as an individual; new crafts being presented when the pupil shows the readiness and eagerness to grasp that particular craft.

In concluding, I should like to quote from a letter sent to Mrs. Greaves by a supervisor of one of the workshops for the blind. "Billy comes early in the morning, works steadily all day at his loom, chair caneing or basket making. He is one of the nicest boys we have ever had and his work is excellent—certainly a feather in your cap." Billy wrote us that he wove forty-five rugs in one month in addition to other work accomplished.

Billy came to the Royer-Greaves School at the age of twelve so undernourished that he looked like a child of seven. His entire body twitched continually in unison with his twitching eyes. Now he is in good health and able to lead a self-sustaining existence.

This is an illustration of the type of child who comes to our school and who, due to the value of handicraft and other subjects, leaves it ready to take his place in the community.

SECTIONAL MEETING — MUSIC

WEDNESDAY MORNING, JUNE 26—9:00 TO 12:00 O'CLOCK

BASSETT W. HOUGH, New York Institute, Chairman

"HOW MAY MUSIC BE MADE BETTER TO SERVE INDIVIDUAL DIFFERENCES IN CHILDREN?"

MABEL CLAIRE LEIVE
Indiana State School for the Blind

In our practical, realistic, and materialistic world we have come to rely to a large extent on the efficacy of statistics. We have efficiency experts in the economic world to observe, classify, and chart trends of business, and it is then their business to diagnose what is needed to make business successful; we have aptitude, intelligence, and achievement tests in the educational field to enable us better to guide the student. These tests, whether in the educational or business worlds, furnish us with a place to start and with a method to measure our success. Is it any wonder, therefore, that we feel that we can rely upon statistics which have been compiled from surveys in the cultural arts, Of course we realize immediately that there is almost insurmountable difficulty present from the first—the recognition of talent and to what degree talent exists in each and every student—because there is such a wide range possible from individual to individual and because the teacher of music or any other art must present his subject so that it appeals to all students. We have learned some interesting facts that show a really high degree of correlation between an individual's love of music and his general intelligence and law-abiding tendencies. The National Bureau for the Advancement of Music has made several surveys throughout America, and in one of its reports the statement is substantiated that in the United States penitentiaries less than three per cent (3%) of the male inmates knew anything at all about music, and in the women's prisons less than four per cent (4%). A second survey of a state penitentiary showed that out of 3500 inmates only thirty-four could be obtained for a band—this is less than one per cent (1%). In direct contrast to this—of the 600 boys who had played in a Boy Scout band not one had ever appeared before a police judge or juvenile court officer. Among the high school students in a typical middle western town it was clearly demonstrated that the children who took music lessons in addition

to their regular academic subjects had a higher scholastic rating than the students who took no formal musical training. Ninety per cent (90%) of the honor pupils were also music students, and all the boys who were on the honor roll were members of some school or community musical organization.

Any music teacher, if he is worthy of the title, should have the fullest possible knowledge of his subject, but it is not enough just to know music. The instructor must understand fully child psychology that he may grade his presentation to take into consideration individual differences in order that he may obtain the best results. He should familiarize himself with each individual because as a whole the class presents a collection of units which in regard to music offer a wide diversity of attitudes. The teacher must investigate the home environment of each student as well as take into consideration the child's reaction to school life. In my estimation music tests to a certain degree offer a teacher one of the best ways of becoming better acquainted with the musicality of the students. These tests have proved very helpful wherever they have been given, and they have speeded up the classification of students of more or less equal ability. After the results of these tests have been interpreted, the teacher will feel safer in encouraging such students as rate very well to continue their musical training, and the student himself will be reassured that he is not carrying a torch for a lost cause. I think we should deal only with capacity tests, such as those for rhythmic recognition, ability to discriminate in pitch, sense of consonance, sense of time, and musical memory.

It would be quite possible and also quite interesting to classify children in accordance with the reactions experienced in the singing class. The group would probably fall into the following categories: a. Real enthusiasm. b. Pleasure. c. Apathy. d. Mere toleration. e. Complete indifference. f. Antagonism.

Modern educators have long agreed that the responsibility of education today is the forming of the child's entire personality and character rather than the saturating of his intellect with mere facts and details. Music is recognized as one of the fields which contributes much to this broader interpretation of education. With this idea in mind it is quite logical for us to examine and determine what this cultural art can add to the personality pattern which educators hope they are developing in each child. By giving the child the opportunity to hear the best musical masterpieces, we are offering much, but it is through the field of creative music that we are giving him the tools for a sound musical education. Lillian Mohr Fox says, "To discuss fully how creative music may contribute to child development we should first consider the nature of creativeness, conditions favorable to bringing forth creative expressions, and perhaps set forth some general fundamental principles which have guided teachers fostering creative work with children." In speaking of the value of creative music, she continues: "We believe that many problems in mental, physical, and social and emotional adjustment may be solved almost miraculously through creative music, provided that the class room is rich enough to take care of individual differences. Music that really functions in child life and enriches living of music, is not dependent upon some imposed leadership, but it is music that springs from within; music that belongs not to the gifted but to every child . . . "

Come with me to my second grade class which is studying first year sight singing —learning to sing syllables, numbers, words, letters of the alphabet. There are seven students, four boys and three girls —Rogers, talented with perfect pitch and endowed with a good mind; Suqette, an extremely gifted child also with perfect pitch; Norman, a slightly older child who excels in all phases of the work; Mary, Adam, Joseph, and Velma, the ones who would impress an observer as average, timid, and rather lacking in talent. At the beginning of the class these children were pushed into the background by their

more brilliant classmates; they refused to perform individually before the group, and they were reluctant even to take part in concerted class work. As time went on, the gifted children kept on doing beautifully, but the others seemed more average than ever. One day before the Christmas holidays in our first lesson along creative lines we decided that we were going to write poems about Christmas and set them to music. It was amazing to see the different reactions among the students —Mary, announcing that she was going to write about her pig which she had left at home in the fall when she came to school. Joseph immediately stated that he was going to write about the chimes. This surprised me greatly because I had never felt that he took any particular interest in that sort of thing. Velma sat there puzzling and looking quite bewildered. She is a beautiful, curly-haired child who had never volunteered to perform alone. Finally she went to work with an intensity quite wonderful to see. Finally, Adam and Joseph struggled along seemingly apathetic, and the gifted children were doing their work as if it were nothing new and different. Before I had time to call on anyone to read his poem, I was startled by Velma's bursting forth, "Mrs. Leive—Mrs. Leive, I have a poem, and I think I have a melody to go with it!" Velma read her poem as did all the others, and it was more than thrilling to note the enthusiasm among the four less gifted children when the entire class decided that Velma's poem was by far the best. We started to set it to music, and Joseph and Adam, feeling Velma's triumph as if it had been theirs, cooperated wonderfully. This is just one example, and for the rest of the semester the entire class worked each to his own capacity, and cooperated wholeheartedly—so much did they enjoy the power that the ability to create gave them that they dreaded the ringing of the bell ending the class. If music can give children this sense of their own value, it has done its share toward building a personality upon a sound basis and toward giving the child something on which he can rely all his life. "If music education is not contributing significantly to the growth of all children, then music is not for every child, and every child is not for music."

Recording performances of individuals, choruses, orchestras, and other musical groups is a very valuable asset not only to the performers but also to the students of any school. In our school during the past few years we have had the opportunity of making records of individual and group numbers. Of course each participant receives a thrill when he hears the playing of the completed record in which he played a more or less important part; but it is also very gratifying to students who had nothing to do with the actual performance to hear their classmates' triumph. It is an invaluable device from which each student may hear his own mistakes and correct them before making the final record. Mr. Benny Goodman, the "King of Swing," presented to our school the ten symphonies which the National Music Appreciation Program distributed. These are some of the world's greatest musical treasures, including Schubert's "Symphony No. 8 in B Minor," Beethoven's "Symphony No. 5 in C Minor," Mozart's "Symphony No. 40 in G Minor," Wagner's "Prelude to 'Die Meistersinger'" and "Prelude to 'Parsifal,'" Bach's "Brandenberg Concertos Nos. 2 and 3," Debussy's "Afternoon of a Faun," "Clouds," nd "Festivals," Haydn's "Symphony No. 99 in E-flat Major," Tschaikowsky's "Symphony No. 4 in F Minor," Brahm's "Symphony No. 2 in D Major," Franck's "Symphony in D Minor." Our school is exceptionally fortunate because we do not have to assemble the students in a formal gathering to present to them these masterpieces, but we play them on the record player in the singing tower which in turn broadcasts them to every part of the school and to the community as well. This singing tower was presented to our school by Mrs. Irene Kitselman of Muncie, Indiana, in honor of Mr. Kitselman. The arrangement includes a vibra-harp, chimes, and record-player, and any student that is honored by being asked to perform is

thrilled beyond measure. This medium brings to every listening child a perfect performance of these masterpieces, and permits the child to hear in a normal situation what a few years ago could only have been heard in a concert performance. Making music such a natural, normal experience is perhaps the best way to appeal to each and every child on his own level. Music has become so easy—we flip a dial on a radio and at almost any time we may find the entire range of musical sampling from the greatest to the most vulgar. It is one of the music department's most serious problems to give the child so fundamental a knowledge of music that he can appreciate the best in each of the several classes of music. If every music teacher presented his subject in a manner calculated to appeal to each and every one of his students at his own level, if every teacher tried to cultivate in her or his students the taste for the best whether it be a symphony, classic, or popular number, the students would become listeners, taking an actual part in the performance, rather than mere hearers sitting passively in their chairs with their minds wandering. Music that is simple and beautful, within the child's understanding; music in which he has the ability to participate happily and in his own way—this should be every music teacher's desire for each and every one of his students.

"SINGING AS A PRIME INFLUENCE ON THE STUDENTS OF RESIDENTIAL SCHOOLS"

ARMEADA WOODS
Illinois School for the Blind

Music fills an important place in the lives of our students.

Grade school music is taught in the kindergarten and first six grades. They are taught to distinguish between high and low, loud and soft, beautiful and discordant sounds. By means of some form of physical activity, they are encouraged to respond rhythmically to music. In the kindergarten, a great deal of work is done with the rhythm orchestra. Many songs are learned, all by rote. This is excellent preparation for the introduction to sight-singing in grade two.

In the second grade, the children are given Braille books of songs, written in syllables, numbers and notes. Rhythm games are continued.

In the third and fourth grades, simple scales and intervals are introduced, and also a study of key relationship. Two-part song singing is done toward the close of the year. In these two grades, the pupil gains much experience in writing music as well as reading it.

In the fifth and sixth grades, grade music is continued on a larger scale.

When the students reach the age of fourteen or fifteen years, they are given the opportunity of taking private voice lessons, if we find that they have any talent, and are worthy of them in any respect.

Much care is taken with our students with respect to posture and facial expression. A great many of our students who have lost, or are losing their sight, have a tendency to lean forward to see where they are walking. As their sight becomes weaker, the farther they lean forward, and at the same time they develop a scowl or frown on their face. This is only natural, but it eventually becomes a habit, and a habit which must be broken, if they wish to make the best impression possible upon the public.

Since our students are under our entire supervision nine months in the year, and with their parents but three months, it is our duty to help them to overcome every

fault and bad habit that we possibly can. There is no better means of helping them adjust these defects more, than in giving them voice lessons. Here we study and practice facial expressions and good posture constantly. Much has been done in aiding many students who have formed these habits.

It is the goal of every person who wishes to have a cultivated voice, to have a very sensitive ear, the ability to pronounce their words distinctly, to have ample power, perfect ease and freedom, an even scale, no weak tones, sympathetic quality, a perfect swell—that is, without sacrificing the tone quality, or without a break, to go from pianissimo to full voice, and return, on any tone within one's range, and to have an artistic concept, or musical taste of the highest possible order. The methods to obtain these objectives is purely personal. One teacher may use one method, and another teacher a different method. The route used is not the essential matter, but the destination is our chief concern.

I find that there are many things involved in the teaching of voice.

There is much discussion, and many opinions given on the proper position of the larynx. In my opinion, perfect relaxation, flexibility and perfect tone is much more important than so much stress being placed on the proper position of the larynx. A good singer is continually varying the tone quality, and the color of the tone depends largely upon the form of the cavity in which it vibrates. If the throat is at all flexible, the larynx will change position in its natural way, moving downward to produce a somber tone, and up to produce a bright tone.

The vocal chords consist of two muscular bands, or ligaments, attached to the same point in front, but at the back are attached to a movable cartilage. They are located in the upper part of the larynx. Their purpose is solely to produce perfect pitch.

The formation of the mouth, pharynx, and the head, or nasal cavities in which the tone vibrates, act as the resonators, increasing the power, and improving the quality.

Much has been written about the position of the tongue, but again I stress the fact that perfect relaxation is much more essential than causing the pupil to be conscious of the position in which the tongue is lying. If the tongue is perfectly relaxed, it will lie in the bottom of the mouth as it should.

The tongue, larynx, and lower jaw are so intimately related that the relaxing of the lower jaw naturally relaxes the entire mechanism, known as the throat.

The lips, also, should be relaxed at all times. If at any time there is a tightness about the lips, it extends immediately to the tongue and throat, and the contraction is felt throughout.

The face should at all times reflect the song. If there is a rigid condition, this is impossible.

The soft palate is a curtain between the cavity of the mouth and the nasal cavities. It is fastened at the center of the roof of the mouth, and terminates in a pendant. If it hangs too low, and touches the back of the tongue while singing, it closes part of the channel through the mouth. In cases of this kind, special exercises should be given to correct this condition, and to train it to lie in a natural position.

The so-called vibrato is a very great fault among many young singers. A certain emotional wave in the tone is all right, and is very pleasing, it is true, but if our tones are properly placed, the natural vibrato will exist, without the pupil becoming conscious of it. If a special effort is made, purely to develop a vibrato, it soon will become a tremolo instead, and as a result we have a voice with a "wobble," which never sounds true to pitch.

Proper breathing is most essential in having a perfectly produced tone. The most important factor in breathing is the diaphragm. It forms the bottom of the air-

tight box in which the lungs are located. Its motion in breathing should be forward and downward. The diaphragm should move outward in taking a breath, and inward as the breath is expelled. It is to the voice what a foundation is to a building. The muscles of the diaphragm should be perfectly controlled at all times. A great deal of time should be spent on diaphragm exercises.

The lungs should never become overcrowded, because this is as bad as too little air in them. It also causes a rigid condition, which of course extends from head to foot. This also causes the throat to become tense. The most important thing is control, and the diaphragm is the point of control.

Breath management is equal in importance with that of the vocal organs .

The vocal organs must be ready to respond instantly to the will of the singer. The lips, tongue, larynx and lower jaw must not be rigid at any time, but of course must not be flabby or lifeless. The throat must be free at all times, and the "open throat" that we hear so much about will take care of itself. If the proper methods are practiced long enough, they will become a habit and the singer will sing with great ease.

Perhaps in a residential school, more than in any other school, the singing period should be the relaxation period. In a residential school, the children not only go to the classrooms together, but they live together in their dormitories. The singing period, whether it is in the form of a private lesson, group-singing or part-singing, gives variation to their regular routine of work, and provides for them a pleasure period as well as a period for gaining education, culture and a better appreciation of good music.

Since piano study is so very essential to anyone who wishes to sing, as well as to play any musical instrument, we begin piano lessons with pupils in the third grade, and in a few cases in the second grade. If they are deserving and show any signs of musical talent and intellect, they are privileged to study from that time through the entire high school course.

Our students are also given the opportunity to study theory, harmony, history of music, music notation, organ and orchestral instruments.

We have a girls' glee club, orchestra and a mixed chorus, of which there are sixty members.

All students are encouraged to perform in public. The two outstanding programs of the year are the Christmas program given by the mixed chorus and the Girls' Glee Club, and the spring ensemble program, given by the Mixed Chorus, Girls' Glee Club and the orchestra. During the second semester, the pupils perform on weekly afternoon recitals. They have further training, by appearing before the school assembly upon numerous occasions during the year. There is nothing which will help overcome an inferiority complex, give self confidence, and thus add to one's personality, more than appearing before the public.

When my pupils give a performance of any kind, I emphasize the fact that they must make a good appearance. The first thing that I insist upon is proper dress and grooming. If it is a girl who is to appear, she must wear long hose, her dress must be neat and her hair must be combed in a becoming fashion. If it is a boy who is performing, he must wear a suit, white shirt and a necktie. With the boys as well as the girls, I stress the fact that they must be properly groomed, and I see to it that this is done.

Perhaps this may seem unnecessary, if it be only a students' recital, but I believe that the proper method should be practiced often enough so that it becomes a habit. The student then feels more at ease when properly dressed than when he is not.

If a group of students such as a glee club or a chorus are to appear before the public, they must be dressed as nearly uniform as possible. For instance, the

girls must all be dressed in white, and the boys in dark suits, white shirts and dark neckties. They must all stand with their feet flat on the floor, shoulders back, heads up and their hands down at their sides.

One of the greatest and most important objectives that our students must have is the sense of proper location, going on to the stage and off of the stage. The manner in which one goes on to the stage will almost determine his success in his performance. For instance, if one is to play the piano, and he goes on to the stage crooked and has to hunt for it, he becomes embarrassed and extremely nervous. As a result, his performance is almost hopeless, before he even sits down at the piano. This is true, whether he plays the piano, sings, plays any musical instrument, or speaks. Too much stress cannot be put upon the importance of proper location. This to me is just as important as their singing or playing correctly.

The student should be trained to go on the stage and take his proper place, with the assistance of no one. When he has to be guided on to the stage, he immediately is given a feeling of inferiority and helplessness. If he can walk out on the stage knowing his exact location with each step, and takes his proper place on the stage unassisted, he at once has a feeling of independence and confidence in himself. His audience will likewise sense a feeling of confidence in the performer.

In rehearsing for a recital, or any public appearance, I rehearse my students many, many times, if necessary, in order that they will sense no difficulty in proper location. In fact, I try to rehearse them enough so that if they have the slightest tendency to be nervous, they will be able to take their proper place from force of habit. One of the points which I stress most is that they must not hurry at any time. They must always take plenty of time, so that they can think what they are doing. After the student takes his proper place on the stage, he must pause a moment to collect his thoughts, and then announce his number, or begin playing or singing, whichever the case might be. If there is an applause, whether it is before his number or after, or perhaps both, he must recognize it in a graceful manner. This is something which seems very difficult for most of our students. There is too great a tendency for them to rush from the stage. This causes the student to look very awkward and ill at ease. Much care should be taken to teach the student to bow properly and gracefully. This is just as important towards a finished performance as any other part of the performance. When the student leaves the stage, I stress again the fact that he must not hurry, but be relaxed, and walk slowly and gracefully.

Recently our school has adopted the practice of issuing certificates in voice, piano, organ and violin, to those students who have satisfactorily met certain requirements. The candidate for a music certificate must be able to perform creditably in public, in his chosen study, and he must complete the work in the theoretic department, including elementary theory, harmony, music history and appreciation. With a possible rare exception, the candidate must be a high school graduate.

With all of our activities, only the best and highest class music is studied.

DISCUSSION

LESTER BEST
Missouri School for the Blind

You have heard Miss Woods' very excellent paper. There is little I can add to it. The dominant theme in my opinion is relaxation.

It is brought out in the paper that this is of prime importance in voice training. This I have found to be true in the study of all music. Unless the student can acquire relaxation, the tone quality and the technique will not develop.

Another point brought out by Miss Woods is the importance to our students of making a good appearance while performing. I heartily agree with her on this subject.

From Miss Woods' paper I assume that most of the programs of the Illinois school are given in the school auditorium. At the Missouri School for the Blind many of our programs are away from the school. We are invited to entertain at churches, clubs, branches of the Y. M. C. A., and various other organizations. In 1938 I had a very talented group. They gave several performances for different organizations, and were paid for this work.

This is in keeping with our practice of encouraging the pupil to make practical use of his training in music as soon as possible. I believe that our pupils overcome self-consciousness more quickly by playing out of the school than they do if they are allowed to play only for their close friends. It seems to me that they get more enjoyment out of outside groups. We constantly emphasize outside contacts.

In conclusion I should like to say that we cannot stress too much the importance of group singing in our schools. This is especially true of our younger pupils, for I feel that talent is more quickly discovered by this means than any other.

SECTIONAL MEETING — PHYSICAL EDUCATION

WEDNESDAY MORNING, JUNE 26—9:00 TO 12:00 O'CLOCK

NEAL F. QUIMBY, Overbrook, Chairman

"WHAT ACTIVITIES THAT MAY BE TAUGHT IN A PHYSICAL EDUCATION PROGRAM MAY BE AN INCENTIVE FOR LEISURE-TIME ACTIVITIES"

NEAL F. QUIMBY
Overbrook, Pennsylvania

It is easy for a man to be moral and well-behaved as long as he has work or has the opportunity to work at making a living and does not become discouraged. We are faced by a situation in which the vast majority of blind people have limitless leisure on their hands, and we must admit that many of them have no idea what to do with themselves or this leisure time. We can not blame them if they become embittered and discouraged under such circumstances. How to train the individual to make proper use of leisure is a problem for all educators of the blind and especially for the physical directors.

We must not take a narrow view of leisure-time activities; it is a problem which vitally concerns every teacher in every school no matter what his particular field may be. The arts and crafts have much to offer, especially music which has almost unlimited leisure-time possibilities for many of those who are blind, and social games such as cards, checkers, chess, and puzzles are of tremendous importance in this connection. There is a need for a coordinated program in every school to cope with this problem. In this discussion, however, we will limit ourselves in the main to such activities as may properly be considered a part of the physical education program.

One of our problems is to find games

and activities which are practicable for the blind and which have a definite carry-over value. Of the physical activities usually offered in the program of our schools today, wrestling, bowling, swimming, track, hiking, and roller skating are the ones most likely to be engaged in by the blind after leaving school. We need to stress more and more those activities which may be carried on by our pupils when they get out into the world, particularly those which can be engaged in by small numbers. I shall consider several of these in turn.

Wrestling is an activity which may be indulged in for many years after leaving school. We have a number of graduates who are making many worthwhile contacts in their home communities through their wrestling. Several are members of local teams and others wrestle in a more moderate way at the Y. M. C. A. or athletic club. In our schools the contests we have with schools for the seeing offer a splendid medium for the enlargement of the social horizon of our pupils. Our wrestlers learn how to meet people and how to conduct themselves in new environments. They develop far beyond the social limitations of institutional life.

Bowling affords a splendid opportunity for socializing with seeing friends as well as for good wholesome physical activity. This sport should be in the program of every school for the blind.

Swimming is one of the best possible sports for those without sight and no school is justified in leaving this activity out of the curriculum. A splendid form of exercise, it has other social advantages which make it most desirable. Every blind person should know how to swim before leaving the school.

Track is a valuable part of the program although it affords less opportunity for leisure-time activities after graduation. Many benefits are secured from exercise in the fresh air, but with the exception of the sprints our track work does not furnish any great stimulation to the organs of the body, nor do many of the events bring about any great amount of improvement in coordination which can be carried over into life situations. The events used in our track program need experimentation and reorganization if they are to fill an important place in our curriculum.

Hiking is an activity which is open to practically all and at almost any age. We must not fail to teach our blind pupils how to walk correctly, and at the same time we must develop a love for walking and an appreciation of its possibilities. Clumsy and awkward walkers will have more difficulty in finding companions than will those who have learned to walk naturally and easily. The technical phases of this training should be the responsibility of the physical education department. The development of an interest in hiking is the responsibility of the entire administration and may be accomplished through the medium of such clubs as the scouts.

Roller skating should be included in the program, as the importance of this sport is self-evident. Schools which have no facilities for skating should find some way to provide such facilities.

Rowing has possibilities which have not been fully developed by most of our schools. In England the fine facilities have made possible the formation of varsity crews which compete with seeing opponents. Our interest in rowing, however, is more from the point of view of recreation than of competition.

Social dancing offers an opportunity for exercise and real social enjoyment which should be utilized to its fullest extent. While many of the members of the staff will assume a measure of responsibility for the teaching of dancing, the physical director must be prepared to take the major responsibility unless there happens to be some one else on the staff who has unusual qualifications along this line.

There is little that is new in the points which have been mentioned, but it is hoped that physical instructors will view their

whole program with the thought in mind that activities with carry-over value are of the utmost importance and can not be neglected. We should realize that this aim must be kept to the fore from the kindergarten through the high school, as it has been shown that the recreational habits of any permanency are those which are acquired during the elementary school period. Once a child develops habits of inactivity it is most difficult to change these to more desirable ones. Elementary school children most frequently play in groups of two, whereas junior high pupils like big-muscle activities and team games. Both sexes enjoy competitive sports, but more especially the boys. While high school pupils enjoy team games, there seems to be a tendency to prefer sports of the individual or dual types, such as swimming, wrestling, bowling, hiking, and social dancing.

If we expect those without sight to become an integral part of the seeing world we must make sure that they have some hobby or activity which will make them an asset to the group. It is a sad truth that generally people do not bother with the blind for any length of time unless they make some contribution to the enjoyment of the whole group. The blind person must have something to offer, whether it be music, dancing, interesting conversation, hiking, or some other phase which makes him a desirable companion. The amazing social success of Robert Allman is an example of this. Robert made his best contacts through his wrestling, but his cheerful disposition, brilliant mind, his ability to take part in many of the activities common to college men with sight, made him one of the most popular men at the University of Pennsylvania. There was no element of pity involved in Robert's social success, for if he had proven to be a burden or a bore he would have been left to his own resources after his classmates had completed their duty calls.

All this means that the physical education department should make the development of leisure-time activities one of its primary aims and at the same time encourage other departments to do their share. Good manners, social poise, and worthwhile hobbies are all important and warrant considerable emphasis. Again, let's enlist the cooperation of the entire school in building a workable plan of action which will develop in our pupils skill in a love for activities which will make their later life fuller and richer.

"WHAT SHOULD BOYS AND GIRLS DO WITH THEIR FREE TIME IN A RESIDENTIAL SCHOOL FOR THE BLIND?"

DOROTHY O. POST
Virginia

Since the preceding paper has discussed the activities of the physical education program that may be an incentive for leisure time activities it shall be the province of this paper to discuss those activities that have no connection with the physical education program. In considering the subject assigned for this paper, the term "free time" has been defined as the time not scheduled for regular class work or dormitory duty—the time used by the child without teacher or house-mother supervision.

In one of Robert Browning's poems we find the lines:

> When a man's busy, why, leisure
> Strikes him as wonderful pleasure;
> 'Faith and at leisure once is he?
> Straightway he wants to be busy.

Those of us who have been connected with a school for the blind for any length of time would probably take issue with Browning for we have a familiar picture in mind. That of the blind child who in his own mind has completed his activity for

the day and he sits hunched forward, often with fingers in eye sockets or shaking his head or hands by the hour, on the porch or in the living room of his dormitory, with no apparent interest in his surroundings. This inertia and lack of interest is often due to lowered physical condition, for it is recognized that the problem of health causes the blind child his greatest difficulty in attempting to adjust himself to a seeing world. This problem is so outstanding that in order to meet the need of the child it should be considered before attempts are made to schedule the child with class work or to seek to guide him in his free time. Careful study of each individual case with a subsequent plan of rest and diet for the child when he first enters the school and careful adherence to the plan regardless of scheduled activity would act as a solution to many of the problems that arise during school years. The child who is strong and well can accomplish more in the classroom and will give natural expression to the things that interest him. In this discussion of activities for free time in a residential school it shall be presupposed that every attempt has been made to meet the individual health problem of each child.

So much individual effort and time is required in schools for the blind for teachers to train pupils to master the mechanics of Braille and to learn the use of hands for class work little time is left for study of the individual interests of the child. Interest finding with the blind child is more difficult than with the child who is not handicapped. The many different fears that hamper the blind and particularly those of movement retard natural expression. Introspection, self-centered interests and inertia all play their part in keeping the blind child from becoming a well-rounded individual. The negative outlook on life that seems natural to the blind child hinders anyone who attempts to meet the need of the child by suggesting activities. If, however, the school offers a varied program of activities that are closely tied to the requirements of life and these activities are presented in such an attractive manner that they challenge the child to use his initiative, the problem of how the blind child will use his free time need not give concern to housemother, teacher or executive.

In residential schools responsibility for the welfare of the child weighs heavily on those in authority. This often results in restrictions on places and activities that the child may use during free time. In residential schools the desire for orderliness is so great that the child often finds himself regimented to such an extent that expression of his interests is impossible. Beds and chairs in orderly rows are necessary where space must be used to best advantage in dormitories. If this condition exists throughout the child's living quarters there is nothing left for him to do but live within himself. Children cannot be expected to use free time to good advantage unless there is some place provided where there is a homelike atmosphere.

The child gets his first training after entering school in the classroom and it is here that the awakening of interests that can be pursued in free time should begin. Much depends upon the manner of presentation as to whether a classroom activity is later pursued in leisure time. The unit plan of teaching opens up many possibilities for free time activities. The primary teacher who is alert to the needs of the child recognizes that the use of hands offsets the possibilities of blindisms and directs his interests into useful activities that may be pursued outside of the classroom. Assignments to accomplish some particular thing in the manipulation of toys or a suggested competition in bead stringing often offers the necessary incentive. In the middle grades hobby clubs where a short time is taken in the classroom to direct activities outside the classroom may lead to useful activity.

In the upper grades possible activities that the child may choose for himself because of his interest in his classwork may be found in his English, science or music classes. Throughout school years reading

is recognized as a valuable leisure time activity. Reading for the blind child is used to best advantage when it is combined with other activities that bring the pupil in contact with people. Braille reading and the use of the Talking Book in leisure time can be guided through English classes. The radio offers many good programs that can add to the interest of English classes. A short time for class discussion of plays or programs before the broadcast, or following it, gives a purpose to listening to the radio, assists in the development of the ability to analyze the strong and weak points of programs and to converse with ease. In a similar manner, appreciation of good literature can be heightened by class attendance and subsequent discussion of movies of recognized value. A school newspaper managed through the English classes would provide an incentive for original writing and would do much toward developing pupil responsibility.

Domestic Science classes have the opportunity for laying the foundation for pleasant social occasions in free time. Since there have been domestic science classes in the Virginia School there have been many occasions in which the girls in their free time took the initiative and planned social affairs for groups of friends. Mary Baldwin College girls who have shown interest in the V. S. D. B. girls have been invited to tea at the school. On one occasion a group of girls pooled their boxes from home and went to the kitchen and planned and executed a supper for a group of their friends. The girls of these classes have used their free time to sponsor a food sale as a money making project for one of their organizations.

Music is the subject to which many blind children turn as a possible outlet for the expression of their inner selves. When real appreciation is created within the classroom many pupils turn to music naturally in their free time. Interest expressed in group classes in the child's reaction to radio programs heard outside of the classroom gives incentive for listening to worthwhile programs of music. Appreciation often results in the child's copying in free time songs and hymns that he wants to keep for later use. Pupils who have a love for music look forward to free time as an opportunity for trying out on their instruments those things that have proved interesting in their study. At the Virginia School this year participation in the State Music Festival caused advanced music pupils to give much of their free time to preparation for the competition.

When extra-curricular activities accomplish their purpose in a school for the blind the child's free time is filled with interesting and purposeful activity. In the social organizations that carry the responsibility for the social life of the school active members find that they need free time for plans and preparation of parties, picnics or dances at least one week out of each month. In the Girl Reserve and Y. M. C. A. once during each year much free time is used in planning, preparing for and attending the Girl Reserve Regional Conference and the Y. M. C. A. Prep School State Conference. Active membership in either of these organizations requires time in addition to the social activities for preparation of programs and the required activities of the organizaton.

The merit badge work, hikes and camping trips of the Boy Scout troops give interesting activities for the leisure time of boys of the intermediate age groups.

The activities of special interest groups provide for the use of particular abilities and give expression to individual interests. In the Virginia School the Handcraft Class for girls, the Boys' Glee Club, the Girls' Glee Club, the Jazz Orchestra and the Science Club have met the need of many pupils who have shown special interests.

An active Junior Red Cross in a school offers many opportunities for the use of free time for purposeful activity. Programs, the sale of Christmas Seals, exchange of letters and portfolios with other schools and war relief projects are only a few of the ways that free time may be utilized. In the Virginia School a point

system has been worked out by which classes compete and receive points for carrying on worthwhile activities. The school as a whole executed a project in which each pupil contributed some effort toward a Christmas offering to the Queenie Miller home—a colored orphanage deserving assistance.

Another useful project was the making of a portfolio to show the work of the Virginia School for the Oregon School for the Blind. Each classroom accepted the responsibility for a section of the portfolio and a great deal of free time was spent in getting together leaves, flowers and information about the school and the community for the project. The result was a portfolio of material that received high commendation from the National Headquarters office of the Red Cross.

It would be impossible to place too much emphasis on service work in a school for the blind. Because of the nature of their handicap blind children depend to such a great extent on others for service that unless they give service in return their personalities become warped and bigoted. Handicapped children often do not recognize that they have the ability to be of service to others. Any project that can be sponsored by the school that will give an opportunity for them to serve, even in a small way, is worthwhile. Free time is used to best advantage when the child expands his selfish interests to include an interest in the welfare of others less fortunate. The coming winter should provide ample opportunity for relief projects for those in war-torn countries. Wise guidance in these projects can make the use of free time happy and worth while.

The time when scheduled work has been completed offers a splendid opportunity for pupils to make contacts with people outside of the school. Schools for the blind are often secluded places where community contacts are difficult to make. It sometimes takes guidance on the part of those in authority in the school to make these contacts possible. Activities connected with church membership and Sunday School classes can be used to good advantage. The Staunton churches invite groups to parties of their young people's organizations. The boys and girls of the school invite their friends in town to dances and other affairs of the school.

Active extra-curricular activities connected with the community make possible social contacts in free time. The girls of Stuart Hall come to the Virginia School on Saturday afternoons and play games with the little girls. The Mary Baldwin College girls coordinate the activities of their Y. W. C. A. with those of the Girl Reserves and Sunbeams. During the past year these girls have worked out a plan of competitive dramatics with the intermediate girls. The college girls assist teams in dramatizing stories in free time. These are presented in club meetings for the pleasure of the groups participating. The contacts often result in individual friendships and the M. B. C. girls sometimes invite their little sisters to the movies or to meals outside of the school. Anything that takes the child away from the school in free time works to the advantage of the school and of the child. He returns to his work refreshed and eager and with the feeling of security that his friends' expression of interest gives him.

Community recognition of the place of the school as an educational institution will provide many opportunities for the use of the child's free time to advantage. The Staunton Men's Community Chorus gives recitals at the school for pupils and faculty. Civic clubs furnish cars for the children to participate in the Santa Claus parade. They also arrange for Santa Claus to visit the school to the delight of the children. The theaters give frequent invitations for the children to attend special movies free.

In the consideration of the wise use of leisure time the problem of the school is two-fold: First, to create within the child an inquiring attitude of mind in scheduled time, and, second, to provide a varied program of activities from which he may choose in free time. The child in a school

for the blind often rightly feels that so much of his time is scheduled there is no need to create interests for free time. One of the many reasons given for the heavy schedules is that the child whose time is scheduled presents less discipline problems. The Latin poet Quintus Ennius expressed it:

That man in truth, who knows not leisure's use,
More trouble hath than one by tasks pursued.

Authorities in schools for the blind must recognize the fact that after schooldays the time comes for every child when he must choose his own activity. If he is not prepared for this time in his early years he lacks one of the best foundations for the living of life. Our aim as educators is to develop well-rounded individuals and the well-rounded individual chooses for himself without compulsion. In our earnestness to provide activities and to encourage the child to keep busy and happy we must not lose sight of the fact that William H. Davies has expressed so well:

A poor life this, if full of care,
We have no time to stand and stare.

SECTIONAL MEETING

SUPERINTENDENTS, PRINCIPALS, AND SUPERVISORS

WEDNESDAY MORNING, JUNE 26—9:00 TO 12:00 O'CLOCK

C. J. SETTLES, Superintendent, Florida, Chairman

"EMPLOYMENT POSSIBILITIES — OLD AND NEW"

P. C. POTTS
Assistant Director of the American Foundation for the Blind, New York

When first the profitable employment of the blind was seriously undertaken, occupations were considered in which the blind as a class might be successful. Because blind persons depend more upon teaching and touch than seeing persons do and consequently develop these senses to a greater extent, the increased sensitivity and proficiency which resulted were utilized in such occupations as piano tuning, basketry and weaving. The problem having been solved to this extent, the blind were left to adapt themselves to these tedious methods of obtaining a partial or a meager livelihood. It was felt that they should be glad to earn anything, no matter how difficult the task, how small the wages or how unimportant the work which they were doing compared with what they could do. The inadequacy of this solution of the problem, however, was due not so much to the difficulty of the task or the meagerness of the financial return but to the fact that the blind were considered as a class and were expected to adapt themselves to certain jobs instead of being able to choose other jobs for which they were better fitted. The crying need at the present time is not to find new occupations for the blind as a class but to provide individual guidance, individual placement and individual follow-up. The blind are not a class, they are as different as you and I. Not all of us who can climb high places without becoming dizzy wish to be steeple jacks or tight rope walkers, and not all of us who are fond of tea want to be tea tasters. Why should we expect most blind persons to want to be piano tuners or broommakers, or to be satisfied and happy doing such tasks.

What is needed is the recognition that each blind person is an individual with individual likes and dislikes and individual abilities and disabilities. There are over a hundred occupations in which blind persons have successfully engaged; there are

many others in which they could engage. Our problem is to find out in what occupation any given blind person can achieve the greatest measure of success, fit him for that occupation and help him to succeed in it. This is a difficult proposition but there are certain suggestions which can be helpful in its solution. A safe rule to follow is, that, if possible, the blind person should do just what he would do if he could see. If he has been employed prior to his becoming blind, he may be able to continue at the occupation for which he has been prepared, even though he or the occupation may have to undergo certain adjustments to the changed situation. If he has never been employed or if his previous occupation is wholly impractical for a blind person, an analysis should be made of his qualifications for a position. Many factors enter into such an analysis: health, personality, temperament, intelligence, manual dexterity, liking for and adaptability to sedentary or outdoor occupations, etc. A person in poor physical condition should not engage in an occupation which will tax his strength or be injurious to his health, a person who has been unable to develop a pleasing personality should not be a salesman or depend upon personal services for a livelihood, a person who is retiring and shuns social contacts should not become a minister or a politician, a person of only average intelligence or less should not be a teacher or lawyer, a person whose "fingers are all thumbs" should not take up electricity or auto mechanics as a trade, and a person who is fond of outdoor life should not specialize in music or literature. A study should be made also of possible occupations — their fitness for blind persons, the keenness of the competition in them, the extent and sureness of the financial return which they yield and the possibility of obtaining employment in a desirable locality. Opportunities for the blind in such fields as millinery, designing and printing are naturally very few; the competition in law and the ministry is too keen for the majority; the financial return from basketry and brushmaking is not adequate or certain and some occupations are localized—agriculture in rural districts, factory employment in industrial sections, etc.

The number of things which blind persons can do well is surprising, not only to the seeing but to the blind themselves. "No one knows what he can do until he has tried," and in the words of Helen Keller, "While they were saying among themselves, 'It can't be done,' it was done." The problems of vocational guidance for the blind are almost the same as those for the seeing, and this brings us to one of the greatest needs in our schools for the blind—the need for educational and vocational guidance. Some teachers in our schools and a few individuals from outside the schools have recognized the need and attempted to do something about it but although they are able persons and are sincerely interested in the problem yet they are not trained in vocational counselling. When it comes to planning a person's future life for him, one needs to be more than a successful man, a successful teacher, or a successful superintendent. This should not be attempted by mail nor after only a brief personal interview, even though this is supported by data concerning the personal, family and school history of the individual and information supplied by his teachers. The mistakes which might result from such unethical procedure might discourage superintendents and delay the guidance movement for another quarter of a century. No one should attempt such guidance who has not had thorough training in counselling and years of experience in case work. Vocational advice given blind pupils should be based upon an extensive knowledge of industry and business and complete familiarity with the blind—their abilities and their handicaps. Let us encourage and make use of vocational guidance, but let us follow the best modern practice and employ the best trained workers. It would be better to wait until we can find and engage competent counsellors than to make mistakes which might ruin persons' lives.

Because the blind person enters the race handicapped, it is very important, not only

that he be naturally fitted for his task, but that he receive thorough training in the chosen field. Now, if our blind friends are to be offered their choice of a hundred or more occupations instead of a mere handful, how shall they be prepared for them and what effect will this have upon the industrial departments in our schools for the blind? The training for most occupations should be obtained outside of schools for the blind and the work in industrial arts offered therein should be primarily of a pre-vocational nature. If the pupils in our schools are to obtain an academic education equivalent to that offered in the public schools and at the same time are to spend a period each day on health education and from one to three periods each day on music, they should not be expected to master one or more trades at the same time. Most trades should be learned by apprenticeship in the industry itself, others should be taught in workshops and training schools for the blind. Some should probably be taught in almost every state, others should be taught in centers which draw pupils from several adjoining states. It is impractical to have the machinery and equipment necessary for teaching some trades in every state workshop and it is inadvisable to have it in schools for the blind. These institutions are intended to furnish general rather than special technical education. Trade education could be offered in the summer but it is not economical to allow a large amount of machinery and the rooms which it occupies to remain idle during ten months of the year. Besides, in order that as many placements as possible may be effective and require as little follow-up as possible, training should be given in ordinary business situations rather than in artificial situations created expressly for such training. The greatest opportunities for placing the blind in industry, therefore, lie, not in finding a few occupations for which blind persons en masse may be fitted, but in providing training and placement for blind persons individually in occupations for which they are already partially fitted by nature and prior training. It is a huge problem to treat each blind person as an individual and to train and place him as such, but only to the extent that we are able to do this will we perform our duty.

"EMPLOYMENT POSSIBILITIES — OLD AND NEW"

J. F. CLUNK
Supervisor, Service for the Blind, U. S. Office of Education, Washington, D. C.

The original subject assigned to me was "Employment Possibilities Old and New," but since others on this program have given excellent enumerations of specific activities, there is no purpose in repeating the same material. Again, a mere enumeration or description of employment opportunities provides nothing in the way of guidance as to how to secure such results. Therefore, I have taken the liberty of changing the subject to "Employment Methods" because methods produce opportunities and each is in direct ratio to the other on a basis of principles and application.

What are the old employment methods, and how much have we changed? Do we have any new methods? What are the results? I am told that about 100 years ago somebody started making brooms in Massachusetts, and we are still making brooms, and there are some shops in this country that are using equipment and the same methods of manufacture as were employed 100 years ago.

What is the result of this sheltered industry as started by the first special work shop? We have erected in various communities large and small monuments to the Gods of Segregation, Isolation, and Helplessness. We call these monuments sheltered subsidized industries. They impress upon the public the basic fact that after blindness an individual must be given

employment under special conditions, and regardless of previous experience or aptitudes, this individual must make such things as brooms and mops, must weave rugs, or repair old chairs. It is apparently unimportant that the person might have been a minister, a lawyer, a physician, a school teacher, a day laborer, a factory worker, a pugilist, an actor, or a farmer. All, after blindness, must conform to the common mold, must forget their natural tendencies and likes and dislikes and make the items that are produced in this temple we call the special work shop. Persons losing sight who are even remotely familiar with this activity and who have any real self-respect and initiative avoid the agency for the blind because they do not desire to be treated with this universal method.

Again, the public is educated to believe that the employment of blind persons is an expensive community luxury. This is brought about by the application of two ideas:

1. That the executives in work for the blind need not be capable business people and that anyone who desires to climb socially or who happens to be a failure in any other occupation or business or who has a little social prestige, that such persons are good executives in work for the blind. Far too many of these people are indifferent or ignorant as to practical business methods and the requirements thereof.

2. A philosophy has been developed that a particular commodity must be made entirely by blind labor. Even a casual study of industry will show that no employer can manufacture any given article on an efficient basis and do so by restricting the employment of his staff to one basic physical qualification. Yet our agencies for the blind proceed to educate both the blind and sighted public to the idea that only blind persons shall be employed. Is this done to justify their appeals to the public for financial support and thus cover up their own shortcomings as business managers? The result is a public opinion in which confidence in blind persons has been completely destroyed and prospective employers of their labor avoid all consideration because they are convinced that blind labor is expensive and they know they can not afford it. Yet the same educators of the public now deplore and have been deploring the apparent lack of cooperation on the part of hard-boiled business men because the same intelligent comprehending business men believe that which they have been telling them.

Again, what have we done in education? We have constructed in the nation a number of marvelous temples to the God of Segregation that we call schools for the blind. Children are brought into these glorified temples at the tender age of five or six years and are kept in the place through their habit-forming years until they are either kicked out because they smoked a cigarette when they were not supposed to or they are graduated at ages ranging from 17 to 21. Upon graduation the superintendent leads them to the door and very graciously and kindly wishes them adieu and good luck and godspeed, and any intelligent superintendent knows that that child has been robbed of all of his initiative and his ability to compete in the outside world. He knows that the youngster is completely ignorant of the rules of the game of life as played by the sighted world and that he has not a ghost of a chance to achieve sufficient success to support average domestic and community responsibilities. The child is returned to a home life so pitiful in its contrast with the luxury of the school that rebellion to the home and aversion to the conditions is a foregone conclusion and result. Instead of a world ready to receive the allegedly marvelous talents of this individual, the student finds a world that is indifferent, that is filled with maudlin emotionalism and compassion, but on every hand doors are closed when there is any definite discussion about employment or the marketing of the so-called marvelous talent developed at the school.

Personal habits that are obnoxious, mental attitudes that are completely out

of tune, and other characteristics that are not normal either have been created or permitted to exist in the student, and as a result, we have a brain theoretically cultivated in the arts of reading, writing, and arithmetic with a knowledge of history and philosophy but encased in a package that is decidedly offensive to the customer and the commodity is thus made unsalable.

Our superintendents as a group seem to be more interested in the beautiful grounds and the physical properties of the institution than in the product produced. What is the attitude of the average superintendent? May we ask is their attitude that of a glorified boarding-house keeper who has taken on the job of maintaining a group of people under certain conditions prescribed by law, until that youngster is sent away permanently and the obligation of the superintendent is thus terminated. Judging from the results, this is the only way to explain the basic attitude of persons in charge of such institutions. We had some hope a few years ago that the Braille classes and sight-saving classes in public schools would help to correct some of these difficulties, but apparently the public school systems do not care to spend the money on the cultural items that can be had so easily in the schools for the blind, and insufficient attention is given in assisting the blind or partially sighted child to harmonize his social and other relationships with the sighted group. As a result these classes have not been developed to the extent they deserve and many persons are prone to believe that the plan is a nice idea but is impractical in application.

There is nothing particularly wrong with the school for the blind if it is properly conducted and the children are actually trained in a practical way for adult life. The fault is not with the principle but rather with the application thereof. As a total result, however, of the schools for the blind and the agencies for the adult blind in their sheltered subsidized shop activities, we have a public thoroughly educated as to the limitations rather than the possibilities of life after blindness. We have done a very thorough job in this respect, and we have no right to complain because people believe that which we are telling them.

Again, agencies for the adult blind who are not yet adult themselves have on a few occasions attempted so-called placement work. They seem to believe that placement agents are persons who are incapable of effective work in any other field and they use this department as a dumping ground into which they throw their least capable staff. Placement agents are sent out to demonstrate to the customer everything that is undesirable and unsatisfactory in their own personal conduct and then wonder why intelligent employers do not buy their ideas. One so-called placement agent said after three years of alleged work with no placements: "I don't believe we have a right to ask employers to hire blind persons when there are so many capable sighted people out of a job." How can anyone expect to sell any commodity with that point of view? Another agency had on its staff a group of blind men as placement agents and the records show that none of these people have ever been able to solve their own problems or those of anyone else. Their personal ethics and standards are very much in question and their only conception of duties is to draw a nice pay check and to have a nice title. When any of the agencies have by accident, more than design, secured a job for somebody, an employee is usually sent out who has been a source of trouble and difficulty to the agency in its sheltered industries. These workers for the adult blind seem to have the idea that the business world should be glad to put up with characters with whom the agency has difficulty under special conditions. If by accident again, such a worker should seemingly make good, the agency director takes a tremendous lot of credit for having made the selection, but if the individual does not make good and problems arise, the same agency worker blames the result upon the poor helpless victim who had to accept his judgment and guidance and this victim is denied

further consideration because he failed at a task in which he had no choice at any time.

Are these old methods? Unfortunately they exist at the present moment in 99½% of our agencies and they are very definitely a present-day problem. Unless we quit doing work for the blind blindly, we shall continue to have the same results as at the present time. As near as can be estimated from published reports, somewhere between 2300 and 2500 persons are employed in the glorious alms houses that we call subsidized industries in this nation and somewhere between 2,000 and 2500 individuals are employed outside of these special industries. On the basis of present day definition of blindness, we have every reason to assume that between 250,000 and 300,000 persons in this nation are blind and that from 20 to 25% of the group are employable. When methods used for the past hundred years result in such a pitiful showing, isn't it time that we took stock of our methods and adopt procedures that will produce a better result?

In the past few years the operation of refreshment stands has been given considerable publicity and it has received considerable enthusiasm. Many workers for the blind approach it as a panacea for the employment ills of all blind persons, and many agencies are today providing more employment through this activity than through any other function, but what is their approach to this subject?

The agency secures the privilege of operating a stand in some building and regardless of how beautiful the premises, the worker decides that a stand can be installed which will cost somewhere between a dollar and a half and two hundred dollars. Second-hand stores and junk shops are investigated to secure equipment at the minimum price regardless of its condition or fitness for the location. The blind person is led by the hand to a wholesaler, introduced and informed that he may purchase and charge supplies. Regardless of his complete ignorance of business and experience in meeting the public, this blind person is placed behind the counter with a blessing and then left alone. When the grantors of the privilege finally realize the hoax that has been perpetrated upon them and their view of the whole proposition has been cleared of the emotional appeal that prompted their original acquiescence, some excuse is found to bring about the removal of the stand. Such reasons as the following are usually given: "We find that the stand causes a congestion of traffic in the lobby." "Employees spend too much time away from their work." "We are altering the building and we require the space." "The fire insurance company objects because of the congestion in case of fire in the building." These and many other variations produce the same result and that is removal of the stand and the termination of their good-will toward blind persons. The real problem is dirty housekeeping, offensive personal appearance and habits on the part of the blind operator, undesirable companions of the blind person who are encouraged to loiter around the stand, the sale of illegal commodities and a few other similar things which no one having any pride in his building could tolerate.

The important result is that not only is this location closed indefinitely as an employment opportunity but other prospective grantors of privileges close their doors and the placement agent finds it impossible to secure new permits. A few agencies for the blind, notably the Canadian National Institute for the Blind at Toronto, have solved this problem by adopting the same commercial methods as are found necessary by successful business organizations and by minimizing blindness as a factor in the operation of the business. This method is sometimes called the management system or a central control system. In it the agency very definitely assumes full responsibility for results, either good or bad, and in those communities where it is operating, public confidence is being restored and opportunities for blind persons are increasing. However, many workers for the blind oppose the principles and their application on the theory that blind per-

sons are differently constructed in their community than they are in the neighboring city or state, and methods that will work in one place will not operate elsewhere. If we are to believe these workers, then it is difficult to understand how the medical profession can have books on anatomy or psychology that can be used universally. The fact is that the agency director either lacks comprehension of business methods and ability to carry them out or does not wish to face facts honestly and recognize the responsibilities that have been assumed. It is much easier to blame the failures upon blind persons who are compelled to accept instructions rather than to assume the responsibility ourselves and admit that our instructions were wrong and that we must make amends. The stand program is only a part of the problem in employment, but it is an important factor in that when successfully operated, the sighted public is educated to believe in the possibilities of blind persons, their prejudice is modified or removed and opportunities of employment to blind persons are provided. A successful stand program improves the business of the blind lawyer, the osteopath, the chiropractor, and the salesman. Industrialists have a different attitude, and the factory workers are given more normal consideration. The properly operated stand will educate many thousands of persons per day in any community as to the ability of blind persons to perform normal functions with which the sighted public is familiar.

We must, in addition to this, eliminate all subsidies in sheltered industries by the use of the most modern equipment and by the employment of a sufficient number of normal sighted staff in conjunction with the blind employers to enable the industry to produce a competitive article at competitive prices without losses. The public will give amply for social service, prevention of blindness, and recreation, and it is unnecessary to ruin employment opportunities for the capable group by emphasizing the inability of blind persons through subsidized industries. The blind person in rural communities and small towns receives very little service from any organization, and yet these individuals can be developed and employed in those areas and they in turn will do their bit in the positive education of the public.

In the final analysis, every man's employment opportunity is dependent upon the confidence of his neighbors and the confidence of persons who will buy his energy and labor. Up to date we have done a very thorough job in the destruction of the confidence of the public in blind persons, and as a result, employment opportunities are infinitesimally small and employment opportunities will only come to us in direct proportion to the methods we use in the rebuilding of this confidence.

"HOW SCALED MODELS ARE USED TO TEACH THE BLIND"

O. J. HILL
Ohio

The idea of educational models used as teaching devices in the classroom is not new as no doubt many of you can attest. Perhaps you still remember seeing the open box shoved back in some inconspicuous corner, filled with cones, pyramids, spheres and other geometrical figures; all covered with dust. The whole arrangement having no interest for anyone unless it be the janitor who had to move them out in order to sweep. Such use made of educational models was not very effective to say the least.

But I can say unhesitatingly that the use made of models at the Ohio School for the Blind is unique. Nowhere in the United States, as far as I have been able to check, is a similar use being made of models. At this school, models have become an integral part of the school curriculum. Not only are the models classified as to their effectiveness in each grade, but also as to their effectiveness as a supplement to each

school subject.

The blind really have only two avenues for learning—the ear and the touch. The auditory perceptions have been increased greatly by the advent of the Talking Book, but tactual learning, or as it is sometimes called "finger-tip learning," has many possibilities not yet developed. Perhaps the Ohio School has done more to develop tactual learning by the use of educational models than any other School for the Blind in the United States.

The expression "seeing with the fingers" may sound a bit fantastic to you, but that is actually the way the blind get their conception of concrete things. Sometimes erroneous ideas are formed of certain objects because of their inability to "see" a thing as a whole or unity, as a seeing person does. This is especially true if the object is too large or too small to bring into their horizon of perception. For instance, we have had pupils who thought that a mouse was as large as a rat or rabbit; that a sheep stood as high as a cow; that a lighthouse was just a light on a pole. Please understand, these misconceptions were not due to any mental deficiency on the part of the individual, but directly due to the fact that no way had been provided to give them the right conception. Blind people have high powers of concentration and only need a chance to correct their ideas of unseen objects. We have pupils who have a good working knowledge of the interior of their school building, but only a slight conception of its exterior.

It was because of these erroneous ideas of common ideas of life that plans were made for constructing models of those objects seldom seen by the blind unless reduced to a scaled model.

If, as a great philosopher once said, "a picture is worth 1000 words" why wouldn't a model have at least the same value for the blind?

The first part of the project consisted in making models of world famous buildings: buildings rich in historical significance, such as Mt. Vernon, the home of George Washington, or a true replica of Abraham Lincoln's birthplace. Other buildings were selected for their symmetry, balance, and beauty, as represented in the Taj Mahal, the Parthenon, or the Arlington Memorial Amphitheatre.

However, our models do not consist entirely of architectural models. The larger wild animals are scaled down to be compared with a model of a horse. In the primary department, we have a small modern house consisting of a living room, dining room, bedroom, and kitchen completely furnished even to an electric stove in the kitchen where the little ones may go and do simple cooking. Land, water, and air transportation are shown step by step from the beginning down to present times. We also have a model of a modern farm with removable and interchangeable fields to show crop rotations. The development of American history in six periods is revealed by the models. Each model shows the distinguishing characteristics and pertinent features of that period. For instance, the period just before the Civil War shows the Mid-Victorian type of architecture, the grist mill, the blacksmith shop, the covered bridge, the dirt road, horse and buggy, in fact, everything in keeping with that period.

Two principles are rigidly followed in the construction of the models. First, they must have educational value, and secondly, they must be a true reproduction of the original as far as it is possible.

Obviously, this last requirement involves a great deal of research. Sometimes three or four volumes must be scanned in order to get the exact height of a doorway, window or archway. Authorities differed in regard to the number of bells in the bell tower of the Leaning Tower of Pisa; one stated there were seven; another, twelve; a third, fourteen. As a matter of necessity, the research work must be painstaking in order to prevent any misconceptions being worked into the models. When a teacher tells a child this is the way the United States capitol looks, she wants to do so without a guilty conscience, because this

model will bring the only true conception the blind child will ever form of it.

Each model carries a brass tag embossed in braille, which gives the name of model, size, and the scale to be used in determining the size of the original. By using a special extension rule it is possible for the pupil to determine the size of any part of the original.

Each teacher is supplied with a booklet which gives pertinent information concerning the structure of the model, its importance, and in some cases its historical significance.

The method of presenting the models to the pupils depends entirely upon the nature of the model and the individuality of the teacher. Some teachers prefer to use what might be called "the approach method." Before the model is brought to the classroom, the pupils and teachers gather all the available material they can about the original. Then the model is brought in to give the facts learned a purpose for knowing. The other method sometimes used is almost the reverse of the first method. The model is brought into the classroom without any previous study of the original. The pupils are permitted to explore it with their fingers, asking each other and the teacher questions. Many times these questions lead to the study of some formal subject, such as the geography of the country, the history of the people at that time, their social and political lives and kindred subjects.

Sometimes I am asked, "Don't the pupils lose interest in a model they have previously examined?" The answer is, "No." On the contrary, the models seem to be a constant source of increasing interest. Each teacher brings out a new application. As the child advances from the lower grades to the upper grades, and as his knowledge increases in general, the model takes on new interest.

As a usual thing only one model is used in a classroom at one time, unless the teacher is making a comparison, or is carrying out some project such as Indian Life, or Life in the Desert, as a special study. The model is charged to the teacher for two weeks with the privilege of renewing for another two weeks, in much the same manner as a book is loaned from a library.

Last year over 3000 persons saw the models. Among our visitors was Mrs. Eleanor Roosevelt who came to the school for the express purpose of seeing how the models were constructed in the workshop and used in the classroom. She was greatly pleased and suggested that they be exhibited at the New York World's Fair. Another distinguished visitor was Helen Hurst, a popular blind lecturer, who has toured Europe and America many times. She came to make a critical examination of the models to determine how much value, if any, models had for instructing the blind. She stated to a newspaper reporter later that the Ohio School for the Blind was doing a pioneering piece of work; that she had sat in some of the finest churches in the world, but never had she formed a real conception of the appearance of a church until she saw that little model of the Salisbury Cathedral.

The models have been in use for over two years, and the teachers of the blind wonder how they ever taught without them. Each year brings up new possibilities. The educational models have passed their experimental stages. They have proven psychologically sound and educationally correct. If you could see how eagerly the sensitive fingers of the blind child takes in every detail of the model; if you could hear the thoughtful questions they ask about the models, I'm sure you would agree with me that they have stood the greatest test of all—the pupils.

We are happy to invite all who are interested in seeing this innovation for the teaching of the blind to stop at our school in Ohio. Plans are being laid now so that every School for the Blind in the United States may secure duplicates of these models. How this will be made possible will be made known later. In the meantime, we cordially invite you to see our exhibit at this school. We will be glad to answer your questions.

Read by Helen M. Kramer, Ohio.

"ENRICHMENT THROUGH MODELS"

EDWARD J. WATERHOUSE
Perkins, Watertown, Mass.

The subject of models is evidently receiving widespread attention in our schools just now. I believe there was only one paper which touched on the subject at the Lansing meeting. The Pittsburgh program lists six, which is more, I think than for any other phase of our teaching work. I take it that this indicates increased activity in making models specially planned for our schools; a task which, unfortunately for our pupils, must largely fall to people like myself, people who have acquired habits of learning through the eyes rather than through the fingers.

Models have many limitations. Perhaps the most serious one is that in many ways they are artificial. Most models lack a suitable environment, a natural atmosphere. A model farm-wagon may be complete in every detail, but without the smell of harness, hay, and horse; without the movement and sounds that are a fundamental in our experiences of farming, the wagon is only a lifeless miniature. The pupil has to breathe life into it from his own imagination or from the teacher's, and this task is frequently beyond the scope of their joint capacities.

But in spite of this and other limitations, learning through models can be a rich experience. As one parallel for the many forms of visual education now in use in our public schools, models enable our pupils to gain knowledge that they would be unlikely to acquire in other ways. Since the general knowledge of our pupils is abnormally slight, this alone would justify the use of models. What is more important to my mind is that the pupil can learn much for himself. He is spared thousands of words, words which are intended to describe, but which in spite of our best efforts as teachers, so frequently omit too much, or even mislead.

Unfortunately, since "the world is so full of a number of things," no school could construct or house a museum of models that would give all the information that seeking fingers want to know . The selection of subjects is a difficult task. At Perkins Institution, where we have been making models for the past four years with the cooperation of the WPA, we began by asking the faculty what models they would like to have for their work. The pupils were also given an opportunity to express their desires. We soon compiled a list of several hundred titles, a number of which we have been able to make.

Some of the requests were impractical. It is surprising how many asked for a model of an iceberg, which can easily be secured from the ice-man. There are some objects that cannot be readily interpreted for the fingers. The most baffling request was for a model of a mirage. We also discarded some objects which depend upon a somewhat intangible atmosphere for complete satisfaction. We felt that more could be learned of Stonehenge through the words of Hardy's "Tess" than from a model which might be difficult to distinguish from a dilapidated graveyard.

We usually reject things which can be studied at first-hand, such as small boats, automobiles, and domestic animals. We have our own horse, goats and hens, with sporadic rabbits, guinea-pigs and white rats. Our pupils visit neighboring farms. A number of wild animals and birds in their stuffed state are in our museum, and though they are only shape and decaying texture, they are better than any models we felt capable of making.

On the whole, objects which are inaccessible to the fingers because of size (such as buildings, big ships, bridges, etc.,) or because of remoteness in space or time, seems to be the most desirable. We have placed much stress on models which can be assembled by the pupils. Exploration by touch is a process of synthesis, building up the whole from the small parts under

the finger tips, in contrast to observation by sight which sees the whole and then focuses on the parts. Consequently we have felt that models which are assembled from small parts may perhaps come closer to normal experience. But whether this be true or not, this type of model demands more time and attention than are usually given to a one-piece model, and consequently it leaves a more lasting impression.

In planning models, we have found our eyes a constant snare. It is a comparatively easy task to construct models which have a satisfactory appearance, but unless there is more to a model than meets the eye, it is not likely to satisfy the finger. Our minds learn so much from our eyes, and learn it so easily, that we are usually contented with what we can see. Suppose we come within sight of a lighthouse. We see it rising, slender and white from a mass of rocks. The whole picture can be absorbed in a very short time. We will claim acquaintance with that lighthouse for the rest of our lives. We will say "I know the Egg Rock Light. I've seen it." We were easily satisfied; we found out what it looked like, and turned our attention to looking at something else.

But put a model lighthouse within reach of an eager blind youngster, and his fingers will find small satisfaction in the outside appearance. He may ask what color it is, but he does not really care what it looks like. Unlike our eyes which function from a distance, the boy's fingers are right on the job, exploring, touching, feeling, grasping. They will soon seek a way to get inside, and will be disappointed in they are denied admission. With few exceptions we have planned our models to allow access to the interiors.

The contentment of people who see with externals is not altogether laziness, of course, although the vast difference in the effort required to look at a lighthouse compared with climbing the stairs to the light no doubt has its effect on us. The truth is that most of us can imagine what the inside is like anyway. From pictures or from some other source, we have a pretty fair idea of it. I hesitate to generalize about the imaginative abilities of blind children; but after all, imagination requires a foundation of knowledge to build upon, and among our pupils, this foundation is likely to be very slender. I do not think they could readily interpret the interior rooms of the lighthouse from feeling the outside walls, even if they had a fair knowledge of how those rooms are constructed. I often marvel at the way some of our youngsters will set about furnishing the rooms of a model house when the roof or a wall is removed to let the fingers inside. They can place everything, except, perhaps, the pictures on the walls, with a competence and sureness which shows the model is giving great satisfaction. But my observations tend to show that if the fingers are kept outside, the mind stays outside also.

As far as possible, our models are self-explanatory. Most of them contain some object which indicates the scale. Stairs make good yardsticks in this respect, for they are practically standard. Doors and windows are almost as good. Pews in the churches, and row-boats with oars on the decks of the ships serve the same purpose. We have felt that this is less artificial than marking the scale on a label, but where an exact measure is called for such as a baseball diamond or football field, we have indicated the size on a tablet attached to the model. The models which the pupils assemble, have diagrams to show where each part belongs.

It is not usually possible to include every detail on a model. To concentrate the pupils' attention on essentials, it is often wise to omit things that are not important. The secret of planning a model which will provide the greatest measure of enrichment lies in the correct choice of what to include, and what to leave to the imagination. Since the problem varies both with the model and the pupils using it, there can be no perfect solution to it, but the attempt to plan models which will give the greatest satisfaction to our pupils is surely worth all the attention we can give to it.

"REPORT OF A NATION WIDE SURVEY OF BRAILLE READING"

W. RAYMOND NIDAY
Ohio

About two years ago, we at the Ohio School decided to try to do something about a feeling that our braille reading was not what it should be. Since there was no standard available by which to judge our reading ability, Mr. Scarberry suggested that we make a nation-wide survey of braille reading in terms of rate and comprehension, in order to establish some kind of tentative norms which might be used for purposes of comparison.

With his valuable assistance and helpful suggestions, I began work on Form 1 of Monroe's Standardized Silent Reading Test. We wanted an evaluation of our teaching methods by finding out whether or not our pupils were reading as well as they should be, compared to pupils of their own ages and grades in other schools for the blind.

Many of you will recall having received our letter asking for your help in making this study. Letters were mailed to the superintendents and teachers of special classes of every school for the blind in this country. Of this number, thirty-nine superintendents of State Schools and eleven teachers of special classes agreed to co-operate with us, which made a total of approximately twenty-six hundred braille readers, in grades 3 to 12, willing to participate.

The tests were brailled at Louisville, and distributed by us to the various schools, together with complete instructions as to how to administer them. In our instructions to the schools, we requested that some one teacher, trained in giving tests, supervise the work, in order to minimize diversity in administering the tests. On the cover sheet of each test, we asked for the following information: name, sex, age, birthday, grade, number of years child had been reading braille, and school. All tests were administered on the same day, January 12, 1938, and returned to me for scoring.

By comparing the results of all those taking the test in the same grade, we felt that some kind of measure of reading ability might be set up; and by further comparing these norms with those already established for seeing boys and girls, we might be much better able to know what to expect of braille readers in preparing their school work.

The aim was to find out if possible to what extent the educational advantages of the braille system might be improved through the use of standardized tests, by showing graphically the results of each school, as well as the results of all the schools taken together by grades.

It is well known to all of us here that touch as a reading medium is a slower process, more fatiguing, and not so well adapted to interpretation as is visual perception; but since these differences are common to all finger readers, they do not explain the difference between a good braille reader and a poor one. While there are many inconsistencies in braille reading, good readers, it seems, tend to make fewer regressive movements, exert less pressure, keep performance more uniform, and waste less time in making return sweeps to the next line. However, there seems to be but little formality about method of reading braille. Since braille is only a means to an end, the most efficacious method of reading it may be the right one. In this study no account of reading difficulties such as feeble mindedness, poor attention, constitutional inferiority, physical disabilities, emotional disturbances, inadequacy of past experience, insensitiveness of finger tips, or self complacency was taken. But it is reasonable to believe that a so-called "Interrupted" braille reader can become more fluent as his word perceptions become more automatic, which should come quite generally with practice.

The questions in these tests were answered by rubbing out with the finger

nail one of the words which appeared in a row of words found under each exercise. Pupils were allowed as much time as they needed to have made clear to them exactly what they were to do, before the test began. Six minutes were allowed for Test I, and eight minutes each for Tests II and III. The time allowed sighted readers for Test I was four minutes; and five minutes each for Tests II and III. When time was called, braille readers were to rub out the last word they had reached in their reading. The text of the exercises in Test II being somewhat more difficult to understand, the scores were weighted in order to make them comparable with results in Test I; twenty-nine was added to the rate scores, and five, to the comprehension scores. Test III was somewhat different in form, some of the exercises requiring writing to answer them, which, of course, took more time for braille than for script writing.

Separate tables made for each of the fifty schools show the grades that took part in the test, the number of pupils in each of these grades, and the range and median of each grade on the following points: ages of the pupils, number of years they had been reading braille, number of words they were able to read per minute, and the number of exercises they were able to do correctly. Also upper and lower quartile deviations were worked out for each grade.

These tables show a wide range in rate of reading braille by pupils of the same grade in the same school. Almost without exception is this true of all schools taking part in this survey. Generally speaking, the same is true of comprehension. Whether the differences indicate that the problem is an individual one or that we don't know very much about correct methods of teaching reading to the blind, I don't know. Observations of the reading plans of the pupils in one school revealed that performance varied greatly among good readers as well as among poor ones.

These tables show too that no one section of the country has schools with uniformly high records in reading ability. High, average, and low scores appear in schools of the East, the Middle West, the Far West, and the South. There is also plenty of evidence here to indicate that the time pupils have been reading braille is not the factor in the reading ability of the blind that we are likely to suppose. High scores in grade 3, as well as high scores in each of the succeeding grades up to 12 of pupils who had been reading only one year seem to bear this out. A number of pupils who took up braille in their late teens learned to read well in a short time.

Of the eleven day classes which returned test results, two tied for highest rate scores with two State schools in grades 7 and 12. All other first place scores were taken by State schools from various sections of the country. In general, however, scores of the day classes were slightly higher than average. The total for this group was only about seventy-five cases, however; whereas those from State schools numbered nearly twenty-five hundred.

Two of the four colored schools participating showed superior reading ability. While these groups were several years older than the median age for their respective grades, they showed high scores in both rate and comprehension.

It must be borne in mind that these observations are as reliable only as these data justify. Allowances have to be made for certain irregularities in these tests which were beyond our control in a survey of this scope.

From a table in which all those in the same grade from the various schools were classified together, median scores were determined. Another table shows the upper and lower quartile deviations in rate and comprehension for each grade, which seem to be fairly consistent with the median scores, and which give a more complete picture of general conditions than do the ranges.

I am aware of the difficulty in following statistics in a paper, but a few seem to be significant at this point.

In grade 3 the age range was from 8 to 20 years; in grade 7, from 12 to 33; and there was a similar range in all other grades. However, the median ages were more nearly what we might expect; in grade 3 it was 11.4 and advanced about one year for each successive grade to 20.6 in grade 12.

There was also a wide variation in the number of years the pupils of the same grade had been reading braille. In grade 3 it was 1 to 9; in grade 6, 1 to 12; in grade 11, 1 to 14 years. Again, the medians were about right. Beginning with 2.4 in grade 3, they advanced to 10.8 in grade 12 in a regular way.

The number of words read per minute varied widely, too, of course. It ran from 2 to 120 in grade 3; 36 to 131 in grade 7; 6 to 95 in grade 12; with similar ranges in other grades. In the median scores here, grade 7 read almost as fast as grade 8, and grade 11, a little faster than grade 12. The medians for grades 9 to 12 were very close.

In comprehension, too, the same wide differences appeared. 0 to 16 in grade 5; 5 to 21 in grade 7; 0 to 54 in grade 10 are typical. The medians of comprehension seemed to pile up in grades 6, 7 and 8; and they were rather close together also in the high school. In grade 3 and 6 the Q scores for the braille groups were higher than the median scores for the sighted groups of these grades; in grades 7 they were the same; and only slightly under in grades 8 and 9.

It, perhaps, is clear to you now why Dr. Hayes said to me that classification by grades is not the way to group pupils in schools for the blind when taking a test like this.

No attempt has been made to bring to you the fact the blind people read well or poorly; only the true picture was sought. We all know that the mechanics of braille makes it completely different from sighted methods of reading; nevertheless it is the only basis of comparing what the two groups can do in this field. As stated above, no account has been taken in this study of the differences in intellectual level, nor of other factors which might affect finger reading. Nor do I have any way of knowing how much care was exercised by those administering these tests in following directions closely. While an honest attempt has been made to have these inferences justifiable, before conclusions can be established as absolute truths, more research is necessary on processes involved in finger reading, and additional testing must be done to insure greater reliability of results.

It seemed to us that six minutes for Test I and eight minutes each for Tests II and III was little time enough for braille readers in the light of our own experience, and from the suggestions of Miss Maxfield and Miss Thomas to treble the time for Braille readers; but one reader in grade 6, three in grade 7 and nine in grade 8 completed Test II in eight minutes or less.

May I say again that my findings are as reliable only as my data; but from these data the following conclusions seem to stand out:

1. Pupils in public schools read about two and one third times as fast as pupils in schools for the blind.

2. Blind pupils seem to understand more of what they read than do seeing pupils. If sighted pupils read more than twice as fast as the blind, their comprehension should be more than twice as high also. These results show that their comprehension is only a little less than fifty per cent higher than the blind.

3. Pupils in schools for the blind are retarded about three years when compared with seeing pupils of the same grade.

4. Some finger readers take up braille very quickly. Individual differences may be the answer to why this occurs.

5. A few boys had very high scores in both speed and comprehension; but girls, taken together, read faster and

understood more than boys. The girls' rate varied from 2 to 18 words per minute faster, and their comprehension from .6 to 2.1 higher than boys of the same grade. Median scores show that boys and girls had been reading braille about the same number of years, the boys being slightly older.

These results are sufficiently encouraging to stimulate further study in methods of teaching braille, reading difficulties connected with the touch system, a further refinement of the system, how to increase speed and ease of braille reading, how to stimulate thought getting and understanding, adaptation of other tests for use with the blind, how to obtain a more normal outlook on life for the handicapped—these are problems on the solution of which depends the welfare of an enlightened group of people, the blind.

"THE HOME TEACHER MEETS THE PRE-SCHOOL AND POST-SCHOOL CHILD"

IRENE JONES
Society for the Aid of the Sightless, Salt Lake City, Utah

The home teacher's chief area of work is with adults and especially those adults who have not had the opportunity of formal training as blind persons in their childhood. She is called upon to train men and women to be blind who, for the most part, have lived by sight alone. She works with used material that must be cut to a new pattern, old machines that must be remodeled for new operations.

Almost inevitably, however, she is drafted for service among blind children. Mothers with blind babies hear of her and ask her to call. She would be heartless indeed if she refused. Parents whose school-age children are losing their sight or have gone blind, teachers in public schools who have pupils with waning vision, enlist her comfort and counsel. Boys and girls leaving schools for the blind, feeling that she has had some practical touch with things as they are in a stern world, often turn to her after their first disillusionment. Unavoidably, she becomes nurse, kindergarten teacher, school co-ordinator, and vocational guide. It is always a fertile field and the teacher loves to cultivate it. Seeds take root so quickly in the soul of youth and the fruit and flower are so luxuriant and so fragrant. Nothing goes to her heart so poignantly as a little blind baby, nothing moves her to sympathy like a young blind girl who, perhaps, is undergoing now what she herself endured in years gone by. Working with children, also, is a sort of respite from the more dreary and arduous task of trying to bestir the older, more immobile blind. So she often turns aside from her main-traveled road and stays to spend an hour with childhood and youth.

It is natural that a mother should have a special tenderness for the one of her flock that is blind. Besides the impulse to shelter that child, she has grown fonder of it by giving it the care and protection that it requires. She has carried it day after day to the doctor, sat beside it through many a weary watch at the hospital, dressed and undressed it more often than she has the other children, invented games for it when the others were out of doors doing their own playing, taught it by rote what they learned almost by instinct, explained it to curious callers, defended it against maudlin sympathy and sheltered it from unfeeling comment. She has lived with it actively and continuously under an emotional relationship and each has grown intimately into the very being of the other. Then comes the letter from a school for the blind. On both sides there is bewilderment, shock, rebellion. A mother, a highly intelligent mother in a cultured home with all the reinforcement of study, thought, and practical wisdom to strength-

en her, said to me when I mentioned a school for the blind for her eight-year-old child: "Oh, I can't—she's my baby." And she began to cry. The child is now at the school, happy, progressing, and developing and the parents are proud of her. In the beginning, they refused to consider it, even to the extent of threatening to defy a court order if it came to that pass. During the year that it took to reconcile parents and child to the idea, I taught her braille and music and I had the family, blind girl included, go with me to the school upon two or three occasions. I lost no opportunity of planting in both mother and child a realistic attitude toward the school until finally the girl was begging to go and the parents were steeling themselves for the separation.

I often think that it is not sufficiently understood what many blind children endure in reference to school. I hope that I may be pardoned if I use my own experience as an illustration. At the time of my accident, I was five. For a year, there were long trips to the city, doctors and hospitals, and in the background—something that I felt rather than knew—my parents' grief and the terrible problem of more and more money for more doctoring. Still, in spite of their worrying, I was jauntily disdainful of my blindness. I climbed fences and trees with my brothers, rode horseback with my sisters, and made pets of every living thing on the farm. Neighbors came in and whispered about me and when we went to town, friends and relatives would stop us on the street and ask questions. That usually chilled me for a moment but I soon forgot it. Mother and Father were indulgent and I soon learned to have my own way about most things. I heard in their voices now and then a sob and I often felt a caressing but trembling arm about me. I knew that I was blind but life for me was pretty normal and very exciting and happy.

Then the bomb dropped out of the skies—a letter from a school for the blind. I was to be sent away! I was to learn to read with my fingers! There were ice crystals now in my heart to stay. It was not parting from my home, leaving my play and pets, not giving up my mother and father. Of a sudden I knew the terrible import of being blind. I was not wanted! They had found a place to hide this little blind girl of theirs whom people whispered about and stopped on the street, this child who cost so much money and caused such sorrow. They had found a way of ridding themselves of the Ugly Duckling!

And reading with my fingers. I crept into the silent, austere front room and opened the Bible. My hands wavered over its flat, smooth pages. I begged it to be readable, to give up its words to my frightened fingers. But I could not feel words in those unresponsive pages and my parents were driving me from their sight and going to make me read where there was no reading.

When I did reach the school, the teachers were kind; they seemed to think that I was homesick and grieving for my parents but it was not only nostalgia that froze me. To the school, I was just one more little blind girl whose parents were sensible enough to send me for education early but to myself I was a little blind girl whose parents were ashamed of me and had put me away from them. When my fingers found braille, I was relieved and, later, after a quarantine for diphtheria, when my mother came to take me home for the rest of the year, I knew that I was loved and wanted. With the resilience of childhood, I threw off the grief and fear and became happy in the new life but the scar remained and even now I have an occasional catch at my heart and a recurrence of that old fear when something happens to accentuate my blindness.

If only someone had known! If only explanations had been adequate! What silent suffering might have been spared, what emotional blocking averted.

The experience is not so rare. Recently friends brought to my apartment a girl of twelve who had been taken out of pub-

lic school a few weeks previously through failing sight. Every one had told her of the marvelous opportunity that was hers for education and specialized training in a school for the blind. She was acquiescent but not enthusiastic. Girls of twelve are not excited over plans for their going to school especially when it means being wrenched away from everything that stands to them as attractive living. I played up the home side of the school, the social life, the association, the sheer fun of dormitory life and then I ended by saying: "And when you come home at the month-end, or on holidays—" She threw her arms about me and began to cry. "They didn't tell me I could leave the school," she sobbed. "I thought I had to stay there for years until my sentence was out." A few days later she entered the school, very happy and when I visited her last, she was completely adjusted and making good progress.

What most of us fail to consider, I believe, is the fact that blindness and entering a school for the blind, carries with it often an emotional situation that may have lasting effects upon the child's life. A man who had gone from public school to an institution for the blind at the age of fifteen, told me of the ways he had tried to conceal the fact in his home town. He had felt a stigma attached to it, a loss of face among his old associates. Not until he had grown up and become a teacher himself did he realize that a little elementary case work in his behalf would have saved him many an adolescent sting. He had shunned his old companions for fear of their belittling him and they had grown to consider him queer, which is worse than being blind. So, because he had become sensitive about his blindness, he had put a mark upon himself. Later, this teacher met a boy in a similar situation. The lad was an introvert. Too much thinking about himself and what the gang thought of him had made him shy and self-conscious. When the teacher called, the boy burst from the room and ran to hide in an out-building. The mother became overwrought and the father went after the boy with a whip. It was only upon the promise of the teacher that nothing would be said about a "blind school" that the weeping boy could be induced to come out and talk. He was interested in auto-mechanics, the teacher learned, and pretty soon the two of them were into the motor of a wreck of a model T that the youngster was overhauling. There was still trouble with the magneto too obscure for the boy's fingers to find. Tentatively it was suggested that one of the neighbor boys be asked to help. It was not long before three or four of the old gang had their heads under the hood. After a time the Ford came to life with a terrific explosion. All the boys piled in and went roaring and blasting down the lane. From then on, the reclamation of the old car was a gang project. The boys went camping in it with the blind boy as host. By the time school opened, he was a normal, extroversive youth and his only regret at entering was that he had to leave the neighbor gang behind. Father and mother had allowed him to build up an emotionality about his blindness and had intensified it by a man's violence and a woman's sentimentality. In this case the home teacher performed two services: he placed the boy with a wholesome attitude in a school for the blind and he broke down a family and community situation that was fast becoming hysterical in the home and aloof in the neighborhood.

Because she is foot free and has entre in many homes through her techniques as a trained visitor, the home teacher is usually in a position to reach many prospective pupils at a time when they and their families most need comfort and counsel. Home teachers have a contribution to make to the development of the young blind and most of them are happy to make it. There has been an expressed fear upon the part of some schools that home teaching tends to keep children out of school. I think that this is not the true case. On the contrary, the twelve home teachers in Utah count it their professional duty to send eligible children to the school. For my own part, I am under instructions

from my superiors in the L.D.S. Society for the Sightless to use every means of encouraging parents to enter their children and of building up a desire in the children to go and make the most of the opportunity. In fact, where there have been occasional withdrawals from schools for various reasons, we have endeavored to reconcile the differences and, because we have the disinterested and impersonal point-of-view of both school and parents, we usually succeed in bringing about an understanding between them. We are not trying to run a rival show. Home teachers in my own state and many whom I have known in other states regard themselves as legitimate agents for their schools. Many of us have known these schools as our dear alma mater, our second home, where we learned, not only the standard curriculum, but those other lessons, those more obscure things like character, self-reliance, poise, ambition and courage, and where we experienced those sweet companionships and rollicking adventures that made our childhood gay and enriched our youth. It is natural that we should want others who need that sort of life to know it as completely and as constructively as did we. Our loyalty and affection for the old school persuade us to plead its attractions and benefits to all who will give ear.

Some of the larger schools, I understand, have field agents who perform this work. Most institutions, however, are not sufficiently staffed and are not strong enough financially to provide the service. It seems to me and to many thoughtful adult workers that a co-operative plan might be established under which schools and field teachers would serve each other in this important division. I cannot think that it would be an encroachment upon school prerogatives, especially in view of the fact that home teachers in general believe it their ethical duty to turn proper children over to the school as early as possible. The real service, of which the schools might avail themselves, is the pre-school training, the social case work, and the development of good mental attitudes on the part of the parents and the children. An invitation from the school to home teachers to visit and discuss frankly problems of the out-of-school children and ways of integrating field and institution work would be helpful to both departments.

So much for the pre-school child. At the other end of the story. the problem is more perplexing. We can take the little child by the hand and lead it to school. But where shall we lead the youth who graduates or who departs early without a diploma? And they do come to us to be led. How shall we keep the spirit high with the fervor that it carries from the classroom and still ease it down to realities; how can we keep the head in the stars but the feet planted on solid earth? If the shock of discouragement is too great, there is danger of a violent stumble and collapse. For the lack of a better guide, the bewildered youngster appeals to the home teacher.

Again, will you pardon my borrowing from my own story. With my diploma proudly in my hand, I returned to the farm. The summer was a vacation but when September came and there was no going back to school, I was brought sharply against a blank wall. My school life had not contemplated my being a farm girl. I had been so long away that I had grown out of the life of home and community. My mother had been called to the Great Beyond, and one by one my brothers and sisters were marrying and leaving to make their own homes. I was institution bred and upon a farm, young and without companionship. I could play the piano, crochet, and recite on programs but I was of little account as a practical help to anyone. I had a high school education and I could see nothing ahead but to let it vegetate. My first thought of escape was through a commercial course, so I entered a business college. This, however, proved to be an impractical choice for, when I had finished, try as I would, there was no job for me. Then I begged a candy factory to let me work as a box-maker. Soon, that little oasis dried up and once more I had to take my training, my educa-

tion, and my ambition back to a remote farm, where a married brother and his family now lived with my father. So crushed were all my hopes and so broken my spirit that it seemed all that I had in the world to be grateful for was my father. He was my one tie, the only one to whom I had the right to cling. Then, in one tragic moment, due to heart failure, he, too, was taken. Life was fast breaking up around me. All my refuges were shattering. For me there was nothing but a future with relatives, tolerated, but again, not wanted. It was in those days that I began to question the idea of educating the blind, of giving them standards and accomplishments that unfitted them for the commonplace and made them dissatisfied and rebellious. Should I not have been happier and more content if I had grown up knowing nothing but dish-washing and tending other people's babies? I was saved from all that by a home teacher.

Under the encouragement and experienced advice of this instructor, Murray B. Allen, of the Utah Commission for the Blind, I learned, first, adjustment and, then, advancement. By normal stages, I went from plain hand-labor into the teaching field. There was in-service training under supervision and later college work in adult education. The point of it all is that there was no one during those desolate, desperate months to lift me up to my ambitions and schooling but the home teacher and I had to cross the state-line into Utah to receive that guidance and encouragement. Without that release, I might still be beating out my life against unyielding bars.

Somehow, I have come to regard home-teaching in the light of a dedication. It came to me in my most despondent hour and set my feet into a lighted path.

It was natural, when I wanted to extend and deepen my service, that I should turn to my church. It is the philosophy of the Mormon Church to take to all its members, whether rich or poor, fit or disabled, every means whatsoever toward the life abundant. The general authorities were easy to convince that their blind adherents had the right to training, rehabilitation, encouragement, and inspiration through the ministrations of the Church. One of our Apostles, George Albert Smith, who is also president for the Society for the Sightless has often said: "The blind people are God's children and are precious in His sight. If we neglect them, we shall have to answer to our Maker." What I had gained from other home teachers I was ordained to share again with the hundreds of blind who belong to the L.D.S. Denomination. I was assigned to open, insofar as might be, a way to a wider material as well as intellectual, social, and spiritual living.

I think that most home teachers, whether working under church or secular direction, feel a particular urge to help the young school student who gropes out into life with wondering, hopeful, timid hands. We have also been wondering, hopeful, timid, a school far behind us, a strange world just ahead. What we suffered after graduation, we want to spare the newcomer.

Mr. Murray B. Allen said in a paper: "A school for the blind is a little world made in every way for the blind, to train children for a big world that is in no way made for the blind." The shock of adjusting from the one to the other is a man-sized task. Some do it with seemingly no great effort. There is, for instance, my old schoolmate who is now United States District Attorney for Idaho, a political power in his state, a friend of the President, who dines with cabinet members. He fought his own fight, but even he will tell you that the battle was a desperate one and that he was often on the point of surrender. Some there are who never win, especially the girls who are so much more sheltered than the boys. Their great problem is to carry institution modes of living into home life. Often the only contribution that they can ever make is domestic service, paying their way in the family by simple household tasks but it is hard for a girl who has lived a sort of hotel life to put on a dish-washing apron and come

down to kitchen work. The boys, too, have their time of rude realization. One said recently: "I'm a pianist, not a house-to-house peddler." It took him a long time to learn that radio and orchestras were over-crowded and that the practical thing was to sell to housewives. Music may come to him but, in the meantime, a home teacher is driving him from day to day out with his sales kit, training him to find front doors with confidence and to speak convincingly to the one who opens the door. Still another boy who had been petted through a public high school asked for a job in the work shop, weaving rugs. He pleaded that he wanted sheltered employment because anything else would mean meeting strange people and that he could not do. However, he is doing it now, thanks to a home teacher, and is developing fast those manly qualities that had lain asleep for want of someone ungentle enough to waken them.

In our schools the children compete only among themselves. John is quicker at arithmetic than Martha. Mary gets better history marks than Jimmie, so John and Mary feel that they are very bright in comparison with all the world. When they make practical contact with young people of the seeing world, they often have to revise their standards: they are not the few at the top; they are just one or two more among hundreds. There is danger of defeat in that discovery if someone is not near to sustain them. That is again an assignment for the home teacher.

She always knows that, during the months that follow graduation (and even before Commencement Day) she will have call from a hesitating, but optimistic boy or girl who must learn and unlearn much before settling down to a comfortable fit in life. When she compares them with blind people of a similar age who have not had the benefit of training in a school for the blind, she knows that she has excellent material with which to work, good foundations in scholarship, well-disciplined hands, an outlook that expects success, a tone of culture and refinement, and above all, a fine courage and ambition. Her heart is bound up in those boys and girls, hoping and praying that she may shield them from too great a shock, that she may keep the flame burning even though it must be fed with oil from commonplace cruses. Blind baby or youth, so often the mission is hers to lead them out of life into school or out again into the reality of the everyday. Here is a field that we modestly think we can help cultivate and we trust that the schools will join us actively in that point-of-view.

SECTIONAL MEETING — BIOLOGY

WEDNESDAY AFTERNOON, JUNE 26—2:00 TO 4:00 O'CLOCK

BYRON B. BALLARD, New York State, Chairman

"THE EXTENT AND IMPORTANCE OF LABORATORY WORK IN BIOLOGY CLASSES"

EDWIN G. PETERSON
President, Montana School for the Deaf and Blind, Great Falls, Mont.

The teaching of biology in schools for the blind is a rather new development which followed the slowly realized but universally accepted fact that the blind can learn many of the technical subjects of high school and college. This realization was brought about by the few pioneers who demonstrated these abilities in public schools and colleges rather than schools for the blind. Taking their cue from what success had been observed under these conditions, members of our own profession

experimented with their fingers crossed and were delightfully impressed with the results.

Not only has our vision broadened and our horizon been extended but our faith in the inherent ability of the blind has really been definitely increased. In addition, during the past decade our schools have been enrolling more and more sight saving students for whom the teaching of biology or any other science is not very difficult. Many of us have felt that the development of sight saving classes has increased our burdens, but whatever is the truth in this matter it must be readily admitted that one great advantage has accrued, namely the acceptance of a more normal view of educational problems.

It is impossible for me in the few minutes at my disposal to give a review of what is being presently done, and I would not if I could. This is perhaps the only paper being read today which is not the result of a questionnaire, for I am certain our office received not less than twenty-five questionnaires during the months of April, May and June. The net result is simply a compilation of what is being done and not a study of what should or could be done. In a way I must be considered a stranger to work with the blind, for my first experience with the education of this type of handicapped person dates from 1937. While I may have brought no new or original ideas into the profession, neither have I brought prejudices or any preconceived notions as to what the blind can or cannot do. I believe that is one of our failings in education—the assumption that we know all the answers, and this attitude is a dangerous one in any situation.

General academic subject matter falls into four main divisions. First, English, which includes grammar, literature, composition, journalism and allied subjects. Secondly, the social sciences which include history, economics, sociology, geography, etc. Thirdly, mathematics which includes arithmetic, algebra, geometry, mensuration and work of this nature. The fourth general classification is science which begins with nature study and goes through biology, zoology, geology, chemistry, physics and astronomy. We can readily observe, I am sure that in many schools we are inclined to be long on social sciences and short on natural science. We are long on theory and short on practice. We love the abstract and shy away from the concrete. This is a condition which should be remedied.

To substantiate this statement which is an indictment of our educational system, we have only to look at some of our domestic science classes as they are being taught in schools today. Students learn to make fancy salads, fudges, ices and whipped cream desserts and fancy cuts of meat, but very few are ever introduced to the large family of left overs and the lowly hamburger and pot roast. Fancy cuts and rich pastries are fine in their place but children who come from ordinary middle-class American homes should be taught how to prepare simple repasts and how to serve appetizing meals from ordinary garden vegetables and cheap cuts of meat. This situation is also true in domestic art where I have observed classes skipping the ordinary mending for tatting lace edgings. In our manual training classes we teach the art of making fancy furniture and forget that the fixing of a drawer that sticks or a window shade that has gone haywire is really fundamentally practical. We leave the important things to transfer of training. My hat is off to the practical teacher—when I can find her.

Too often we go into classrooms and see children studying pictures of common flowers when the very flowers are blooming in profusion outside. We study climate and rainfall and physical geography out of books when the world is full of raw material for nature study. In glancing over a teachers' lesson plan one day I observed that the class was studying different kinds of sea fish. We live about 1000 miles from the ocean, but none of the pupils, or the teacher, knew the kinds of common animals living in our own area.

All of this, while seemingly irrelevant to the main topic brings us to the chief argument in favor of complete and comprehensive biology courses including laboratory work. And by lab work I do not necessarily mean that teachers of the blind should take their classes through the same courses that the normal children follow. We do not use this method with any other subject. As I observe classes for the blind and compare them with public school classes, the fundamental difference seems to be that the teachers of the blind are a practical group because of necessity. I am firmly of the opinion that the blind student will enjoy laboratory work if it is carefully designed to eliminate frills and stick to fundamentals. We sometimes make the mistake of wanting to make doctors out of laboratory students and artists out of music students, when the limitations indicate that a general knowledge is more to be desired and is more attainable. The laboratory is the place where the child should feel more at home. He is there dealing with tangible assets. There is no question as to the capacity of the blind to obtain enjoyment from nature study whether it be a study of animal life or appreciation of flowers. There are several aims of biology teaching which may be listed as (1) the appreciation of nature with the aid of the senses of touch, taste, smell and hearing. (2) The recognition of birds by their call, the identification of flowers by their scent; the knowledge of plant life by touch. (3) The first hand knowledge of simple forms of animal and plant life by dissection and analysis of component parts. (4) The development of hobby outlets from the field of practical study of science which might be represented by the collection of flowers, leaves, by planting a garden, or classifying birds and animals of the locale. (5) Finally, the instilling of a love of nature is not the least of the objectives of the study of science.

There is a great need for illustrative material, but again we have only to open the door of the world of nature and a wealth of material is at hand. The lakes and streams abound with fish, rocks, and plant life. The air is filled with birds and all sorts of native and wild plant life is obtainable without cost. In the state of Montana there are more than 350 varieties of wild flowers and our own students have gathered some 50 varieties of insects and animal life on the school grounds. This material alone is of sufficient extent to provide material for many classes.

The average blind student has quite a limited background for biology and this must be compensated for by offering some preparatory work. It is recognized that self activity is the expression of mental growth and since this is motivated by interest we may induce interest by stimulating curiosity.

An alert teacher of biology will first study the work that is being offered in the public schools of the state. The second step will be to analyze this from the standpoint of the blind child. The next step will be to organize the material with a view to laboratory facilities that are available and the final step is the construction of a laboratory manual which will be a guide for the teacher and pupil for the class work. There is nothing difficult about the program if one will visualize the practical objectives.

We use all manner of tactile equipment in geography, reading, music and other subjects. We should likewise do so in biology. In the January, 1934, edition of the "Teachers' Forum" there is a report of the general science committee which deals comprehensively with the subject.

The general aim of the course of study is "to acquaint the child with his environment, to foster his confidence in the material world about him; to afford him the best possible interpretation of his surroundings; to so organize the common experiences as to make them directly and purposefully useful."

Naturally the field of science is so broad that we can make but fleeting reference to some general principles. Some of these are:

1. Use real materials in preference to models; but when models are used, have them as life size and life-like as possible.

2. Teach what is of immediate interest —that is local flora and fauna.

3. Do as much practical laboratory and field work as possible.

4. Study nature in its natural state.

The whole world of nature is within reach. It is a simple world that is about us, and laboratory work is only the process of learning by handling about the wonderful things around us.

"WHAT FEATURES SHOULD BE CONSIDERED IN SELECTING A TEXT IN BIOLOGY FOR THE BLIND"

J. H. BOTTS
Missouri

Let us interpret this topic as asking, "What biology should be taught the blind?" for it is evident that the biology which should be taught constitutes the features which should be considered in selecting a text. It must be understood, too, that regardless of the material included in a text and the amount of supplementary material which may be accessible for more exhaustive study, the fact remains that the importance given a topic and the amount of follow-up or research done upon it is, to a great extent, the responsibility of the teacher. However, it is desirable to have available in the text the material which is considered important, including references which facilitate further study of topics of interest and value to the class. There is no attempt to suggest in this paper all features which are generally accepted as belonging to biology.

Biology, which is the science of life, is based upon the important life functions which are: sensation, motion, food-taking, nutrition, respiration, excretion and reproduction, together with the life processes, which include the operation of cells and organs as vital functions are performed, both in plants and animals. Of course, it is essential to consider the care of the body or plant, its protection against disease and enemies, the treatment of different diseases as they attack the body or plant, and the effect of these diseases upon the important life functions and the life processes.

Then, to better understand life as it is today and to better direct and control its trends for the future, biology should consider the history of life, its development and change through different eras of time as based upon scientific study and investigation. It should go back to the single cell plant, the algae, and down through the periods of time to the present with a brief consideration of the life of each period. Although there is a difference of opinion as to the age of the earth scientists agree that it is very old and that it is very difficult if not impossible for one to have even an approximate conception of such a vast expanse of time. The included table furnishes the basis for some very interesting studies about the life that existed long before human life began. It is found in New Biology by Smallwood, Reveley and Bailey, and was taken from Bulletin No. 769 United States Geological Survey.

However, the more interesting and important study should deal with modern life and its biological problems. Experiments in the production, care and growth of plant and animal life that point to proper planning and care of human life should be encouraged. Also, there should be a willingness on the part of instructors of the blind to present known facts as such and to discuss theories to the end that an incentive to further study might be created.

Era	Period	Significance
Cenozoic 55,000,000 to 65,000,000 years ago	Recent	Domestication of animals. Written records. Dominance of man.
	Pleistocene	Periodic glaciation. Extinction of large mammals. Neanderthal man and Cro-Magnon man.
	Pliocene	Man uses fire and rough tools.
	Miocene	Advance in anthropoids. Culmination of mammals.
	Oligocene	Extinction of early mammals. Early anthropoids.
	Eocene	Primitive monkey, horse, and elephant appear. Increase in number of mammals. Some of them live in tree tops. Modern flora.
Mesozoic 135,000,000 to 175,000,000 years ago	Cretaceous	Advance in mammals. Last of dinosaurs. Rise of flowering plants and modern insects.
	Jurassic	Egg-laying mammals appear. Birds appear with teeth. Great dinosaurs appear. Rich marine fauna.
	Triassic	Rise of dinosaurs. Connecting link between mammals and reptiles appeared. Cycad-like plants.
Paleozoic 350,000,000 to 470,000,000 years ago	Permian	Rise of primitive reptiles.
	Carboniferous	First reptiles appear. Large amphibians. Abundant sharks. Spore-bearing plants.
	Devonian	Lungfish. Forests. First amphibians appear. Chain corals disappear.
	Silurian	Primitive sharks appear. Brachiopods.
	Ordovician	Chain corals, starfish, and fish-like animals appear.
	Cambrian	Advance of invertebrates. Trilobites abundant.
Proterozoic 700,000,000 to 1,000,000,000 years ago		Remains of life mostly lacking. Fossil algae.
Archeozoic		
Total age of Earth 1,240,000,000 to 1,710,000,000 years	There is still a wide difference of opinion about the exact amount of time that has elapsed in each division, and it is very difficult to find geologists who agree. The important fact is that the earth has existed for a long period of time, but the period when there is the first record of abundance of life is the Cambrian; from then to the present time represents but a small fraction of the entire age of the earth.	

Dr. John H. Gerould, professor of biology, Dartmouth College, remarked that probably there is no branch of science in which greater progress and more fascinating discoveries have been made in the last twenty years than in biology. We might add that probably no branch of science has aroused more bitter religious and even political controversy than has biology. Such controversies relative to Darwin's Theory of Evolution, for example, are responsible for popular misconceptions concerning the theory itself as well as the vague and inaccurate conceptions about life. Many seemingly intelligent people refuse to give the Great Creator any of the attributes of a scientist when it concerns human beings. They recognize the value of proper selection and cross-breeding which has developed the fine draft horse or the sleek race horse from the scrubby three-toed animal of early times, and the fine fruit, grain or flowers from some apparently valueless plant, yet they hesitate to apply the scientific discovery called Mendel's Laws of Cross-breeding to people where it would result in placing obstacles before the marriage

of the congenitally feeble-minded, or of people with criminal tendencies, or of people whose off-spring will be a constant burden on society. Some biology texts discuss rather fully the Darwinian Theory and the Mendelian Law and most texts at least mention them. They are definitely in the field of biology and are features to be considered in looking for a basic text. One cannot study them without noting the harmony of their conclusions. Neither can one study these theories without feeling that each generation has a definite responsibility to improve the standard of human life for succeeding generations. I am sure we will agree that it is desirable for the young people in our schools to want to better conditions in society for future generations in as far as they are able to do so. But to impose upon a group of people certain principles of conduct and behavior against their will, even to secure desirable ends, is rather difficult and often impossible. However, with the group wanting to attain these desirable ends and seeking guidance, progress in the right direction can be made. If Darwin's theories are true there is no point in not including them in a biology text where they rightfully belong. If they are false, the more they are examined and discussed the sooner their weakness will be revealed. Here, as in all class discussions, the wise direction of the teacher is needed. Mendel's laws are almost universally accepted but, as suggested before, their application to human being is very slow. Their meaning and value should be included in a biology text so that through education more intelligent thinking might be brought to bear upon some of our nations pressing social problems.

The text should include an account of the experiments of Professor T. H. Morgan and his co-workers at Columbia University and the California Institute of Technology in which they have investigated the question of linkage of characters in the tiny banana fly, the Drosophila, by pairing and arranging chromosomes carried by its somatic, or body building cells. Professor Morgan's work bids fair to rival Mendel's experiments with the peas in biological fame and importance. The results of arranging and shuffling of chromosomes and genes in the chromosomes are amazing. Flies were bred with white eyes, some with pink eyes, some with no eyes at all, some with duplicate legs, some half male and half female. Many were found to be a new permanent species.

These studies show that groups of characters can be transmitted according to Mendel's law, a whole group to a chromosome and a single character to one of the hundreds of genes in a chromosome. With a knowledge of the difference in number of chromosomes in male and female cells it aids in an explanation of certain sex-linked characters as color blindness, the inability to distinguish certain colors, or haemophilia, a disease which prevents the clotting of blood. It also points to the explanation of why, although women rarely suffer from either color blindness or haemophilia, daughters and granddaughters of a defective male are carriers and hand the disease to half their sons in accordance with Mendel's Law.

I believe these features should be made available to the blind as well as to the sighted. They are facts about life and in biology one expects to deal with facts about life.

Following Mendel's Law our text should contain a chapter devoted to the biological aspects of blindness. Some object to this on the grounds that it will tend to emphasize their handicap. I am inclined to think, however, that the emphasis would be more from the viewpoint of the sighted than from the viewpoint of the blind. Most normally intelligent blind people are fully conscious of their handicap and know what it means more than any sighted person. For many years medical science and legislation have been directed toward the prevention of blindness. Educational measures such as safety drives to prevent accidents, instruction in the proper treatment and care of eye injuries, etc., have helped reduce the number of cases of blindness by prevention. Not so much has been done

to impress the blind with their responsibility in this prevention, although some of the blind have lectured to sighted groups on the value of the proper care of the eye. This chapter on the biological aspects of blindness should be prepared by doctors who have had wide experience in the care and treatment of eye conditions. They should be able to discuss the causes of blindness from a scientific viewpoint and should understand Mendel's Law as it applies to certain eye conditions. This study should stimulate in the student a desire to properly care for his eyes as a means of making a better appearance as well as securing his own comfort and promoting his health. It should stimulate in the student a desire to know, biologically, his own eye condition—whether or not his blindness is transmittable to offspring. Then, of course, the school should provide adequate means to satisfy this desire of the student by furnishing efficient medical facilities to him. By the time a boy or girl graduates from high school they should have a well-founded idea whether or not their blindness is transmittable. The importance of this feature of education can be readily understood by those in schools for the blind where several generations of a family have, in their time, formed part of the school enrollment. From the reaction of some of the blind who have been interviewed, I am convinced that the blind themselves who have a sufficiently high I. Q. to reach the point in their school life where they will study biology would welcome information relative to their own blindness: appearance, hygiene and possible transmission.

Another feature which we should expect to be a part of a course in biology is sex hygiene. This has been taught in sighted schools and probably in some schools for the blind for a number of years. In some schools this instruction is carried on in separate classes of boys and girls in physical education. Others give the instruction in mixed classes of social hygiene, and still others include sex hygiene in the regular biology course. Social agencies have been active in disseminating information about the nature and treatment of syphilis and other social diseases and stress the importance of united effort to successfully combat them. The need for this phase of education is evident to those who are acquainted with our blind cases which are the result of a syphilitic condition in either the blind person or the parent. Educators will agree, too, that health is of more importance than any other attainment and is essential for success and happiness. The disregard for personal hygiene and the laws of health by young people tends to hurry them into premature old age, to make of them misfits in society, to destroy their ability of gainful production and to increase the burden of a society which tries to keep even its useless members alive as long as possible. Due to the fact that society does protect its weaklings while the strong and physically fit are slaughtered in wars makes it increasingly important that educators arouse in youth a sense of responsibility for placing future generations on as high a plane of efficiency as possible. Our schools should cooperate with other agencies in giving instruction in sex hygiene and biology would seem to be the logical course in which to include it.

Although little has been said about the study of plants and animals I do not mean to minimize the importance of such study. In fact, most of the material in biology should deal with plant and animal life, assuming, of course, that it is properly related to human life as the highest biological development.

In the study of the plant there should be full size illustrations in braille showing such parts of its flower as the sepal, the stamen, the pistil, etc. to serve as a key in studying the plant itself. If a botanical garden is in the vicinity of the school, arrangements can be made to secure plants and flowers for tactual study in the class room. It is noticeable that the interest of the class is easily maintained at a high level when objects can be placed in the student's hands for examination. In order to get the viewpoint of my biology class

on the material which it would include in the course, I asked the question, "What should be included in biology to make it more interesting?" The following response from one of the girls is typical of the reaction of the class:

"For a thorough study of biology I think we should take trips out into the parks during which plants and insects are collected and brought back for observation and study. There should be an extensive laboratory with live frogs—grown frogs and little tadpoles, toads and snakes, (at least one or two). In the laboratory should also be mice, rats and moles and other common animals which are easily caught, so we might use them for dissection. There should be in this laboratory models of hearts and other important organs of the body. There should also be many kinds of plants to study. There should be stuffed birds and models of fish. In this study we should do some experimenting such as demonstrating the chemical change that takes place in the process of digestion. Instead of just reading about an animal, plant, or insect, why couldn't each person in the class take a special plant or animal or insect—such as were available—and learn what he could about it and then make his report to the class. Of course, where sight was absolutely necessary the teacher could give a little assistance."

This probably voices the view of many other biology students in our schools. A well equipped laboratory is most likely impossible for most schools for the blind, but seasonal trips can be made for the study of outdoor life. Much suggestive material should be included in the text, both for directing the class on these field trips and as an aid in the examination and study of live objects in the class room or laboratory. We cannot over emphasize the proper care of the body and the establishing of habits of health and hygienic living. Models of organs of the body should supplement the teaching of the function of the organ and its care, as should models of animals, when possible, supplement the study of the animal.

In order to get some information from other schools for the blind that might be of interest and a help in selecting the features that should appear in a biology text for the blind, I sent out some questions to a number of schools in scattered parts of the United States and got responses from sixteen of them. Three of these schools do not teach biology at the present time. The following summary is given of the responses of the 16 schools.

Of the thirteen schools that teach biology eleven use models of plants or animals to aid in their class study. One of these eleven prefers small models while ten would rather use life size or larger. Five of these schools advocate the dissection of animals, six say that the blind should not attempt dissection and one is undecided. The three who do not teach biology would advise against dissection. Seven schools would give a little time to the discussion of Mendel's Law, while six schools would give much time to its discussion. Three schools would not include sex hygiene in biology, three would teach it in some form, preferably to segregated classes, while ten schools, including the three where biology is not now taught, recommend teaching it as a part of the biology course. One school would not discuss conditions pertaining to inherited blindness while fifteen would. All the schools responding say that the student, by the time he graduates, should be told whether or not his blindness is transmittible to offspring, and all but one think this should be done by a physician. One is doubtful whether the student should be advised to consult a physician in this matter. Twelve schools believe that a chapter in a biology text for the blind should be devoted to the biological aspects of blindness. One school is doubtful while three say no. The consensus of opinion of these schools seems to be that all biological truths are as essential to the blind as to the sighted.

In conclusion, I would like to thank those who responded to my questionnaire. If a new text in biology is to be worked out, I am sure these responses will be helpful. And may I add that if self determination is the right of an individual or a society, then it is the obligation of the individual and of the society to know all the factors which will influence the things to be determined.

SECTIONAL MEETING — BUSINESS MANAGEMENT

WEDNESDAY AFTERNOON, JUNE 26—2:00 TO 4:00 O'CLOCK

LESLIE M. HAYS, Iowa, Chairman

"INSTRUCTIONAL COST"

SUPERINTENDENT ROBERT W. WOOLSTON
Illinois

The subject assigned to me is the Instructional Cost in Residential Schools for the Blind. But being familiar with such expenditures in my own school only, and having the opinion that the chairman of this meeting desired information from the different schools for the purpose of comparison, in order that we may learn through the discussion how we might either economize or spend our funds to a better advantage, I mailed a brief questionnaire to each of the schools, and while it contained only three short questions, it involved considerable work on the part of the schools that were kind enough to review their records, separate their accounts and furnish me with the data for this brief report. I want to thank you all for your cooperation.

A few schools that teach both the deaf and the blind, and do not keep separate accounts, were unable to give accurate figures, however, they gave approximate information which has been included.

A number of schools presented figures comparable to one another, and yet in considerable contrast to those from other schools, as you will note.

The first question—the direct cost per pupil for instruction based upon teachers' salaries, was answered by thirty seven schools. But since time would not permit my giving the individual replies, I have preferred to group the answers. Two schools gave their cost for instruction based upon teachers' salaries only, as a little less than one hundred dollars per pupil for the year ending June, 1939. The next higher group of seventeen schools, each gave definite per capita costs, based upon teachers' salaries, varying from one hundred and nine dollars to one hundred and fifty dollars. The third group of fourteen schools presented figures for direct instructional cost based upon teachers' salaries only, ranging from one hundred and seventy one dollars to two hundred and ten dollars per pupil. The fourth and highest group of four schools showed a per capita cost for direct instruction, varying from three hundred dollars to three hundred and eighty nine dollars. The lowest per capita cost for instruction only, for the year 1939 was eighty two dollars and fifty cents, the highest, as stated before, was three hundred and eighty nine dollars, while the average per capita cost for instruction for the thirty seven schools reporting was one hundred seventy seven dollars and sixty cents, according to figures submitted. While there is a very wide variation in these per capita costs in the several schools, showing considerable difference in teachers' salaries, several schools explained other factors which account, at least, partly for the difference. Some schools find it necessary to retain the same large staff of teachers, with smaller classes, and an enrollment that is decreasing from year to year, while others

have about the same enrollment or a larger one with the same number of teachers as in former years. One school in particular reported that its enrollment had been doubled in the past five years with only slight additions to the teaching staff. In both schools the teachers' salaries had remained about the same, but in the first there was a decided rise in the instructional cost, while in the second a material decrease. Some schools have constantly introduced new courses which, of course, has had a direct bearing upon the instructional cost with no change in teachers' salaries Another explanation given, which should be taken into consideration, is the fact that the majority of the nine hundred and fifty teachers in our schools have their maintenance in the institution at a very reasonable rate, while others must meet the high cost of living in their communities. While these are only minor points they are given by way of explaining that where teachers' salaries differ in the several schools for the blind, they do run more or less parallel with salaries paid public school teachers in the same localities. In other words it costs twice as much to live in New York City as it does in Jacksonville, Illinois. A few schools have extended the four year high school course to cover a five year period in order to give their students greater advantages in the music and industrial arts departments. When all these factors are taken into consideration, which show a decided variation in the instructional cost, the difference in salaries is not as great as might seem apparent.

Only twenty nine of the thirty seven schools answering the first question were able to give accurate information pertaining to the second, which read—what was the cost of educational supplies as per instructor for the year ending June 30, 1939? The difficulty in replying to this question was due to the fact that the costs of schoolroom supplies were not kept separate from other accounts. This question included all educational supplies for the academic, music, industrial and practical arts and physical education departments. It did not include class room equipment nor the quota account in the American Printing House for the Blind. Seven schools paid from eighteen to fifty dollars for instructional supplies as per teacher for the year. Eleven schools paid from fifty to one hundred dollars for supplies as per instructor and eleven other schools paid from one hundred to one hundred and seventy dollars as per instructor. As stated before, the lowest cost was eighteen dollars as per instructor, and the average cost per instructor for the twenty nine schools was eighty six dollars and forty cents. It was apparent that the greater part of these expenditures were for the industrial arts department. The difference in figures is accounted for, largely, by the size of the industrial department which the schools maintain and the nature of the work. Much of this money is refunded, either to the school or to the students from the sales of hand made products.

The same twenty nine schools that answered the second question also replied to the third, which was—what was the percentage of increase cost per pupil for instruction based upon teachers' salaries plus the cost of instructional supplies during the past five years. Three schools indicated a material decrease in this cost during that time, while the other twenty six schools stated increases varying from eight to sixty per cent with an average of twenty four per cent, but it should be remembered that some of the figures were only approximated.

We, who have been teaching for many years, fully realize that the costs have been mounting higher and higher, but we must not be unmindful of the fact that the educational advantages which our schools are offering, with their many additional new courses, are on a much higher plane, are much superior to those of ten or even five years ago. The tendency throughout the country is not to try to operate at the least cost possible, but rather to offer better educational advantages, to employ teachers having higher

qualifications, teachers meeting the requirements of at least the Bachelor's degree, and in many instances the Masters and even the Ph. D. The teachers in most of the schools are paid according to the salary basis of the public school system in their respective localities and also in accordance with their scholastic attainments. It is the consensus of schools for the blind that their teachers are somewhat better qualified, since in addition to their degrees, they have had special training.

One school attaches so much importance to training and experience that it requires all teachers, in every department to hold at least the Bachelor's degree in their departments and all are paid on the same salary basis, beginning with the minimum of $1,400 for the school year with an increase each year until the maximum of $2,350 a year is reached. The Board of Education in this instance stressed the necessity of employing no teacher who had had less than three years of teaching experience prior to being employed in the school for the blind, but was willing to pay a fair minimum salary and to encourage the retention of experienced teachers with a substantial increase each year until the maximum salary $2,350 was received.

To illustrate again the attitude of schools for the blind toward retaining well qualified and experienced teachers—one Board raised it's teachers salaries 20% rather than lose them and begin all over with inexperienced teachers.

As we think of the variations in these instructional costs we must take into consideration, the size of the school, and remember that the smallest has at least a twelve year academic course, a department of music, a department of industrial arts, and a course in physical education, just as the larger schools have. It was stated here yesterday that no school could offer an efficient course of study for less than $600.00 a year, but I believe that that is low enough, and yet much would depend on the location of the school.

One school that employes thirty two teachers gives the following example of expenditures which are worked out on a percentage basis. For example—Salaries and Wages, $129,553.00 which is 66% of the total appropriation for the year, and 55% $129,553.00 is paid to teaching staff. For Operation such as food, fuel and household supplies, $39,500.00 or 21% of the total appropriation for the year. For Repairs and Equipment $17,000.00 or 10%. Traveling expenses, $1,300.00 or 2%. For Office Supplies, $898.00 or 1%. It's per capita instructional cost based upon teachers' salaries plus instructional supplies was $280.00, and it's total per capita cost for 1939 was $945.00 which is $195.00 per pupil over and above that of 1930.

In conclusion, I should like to state that my Board, which is the State Department of Public Welfare, and also the State Superintendent of Public Instruction, who is our educational advisor, and to whom we make our reports, encourage us to introduce the new courses as the changing times require and to spare no reasonable expense in offering the best educational advantages possible to the school and at the same time to practice economy.

Housing Cost per Pupil.....$67.65

This includes household supplies, furniture, household equipment, bedding, coal, telephones, water, light, mending, library and amusements, repairs on household equipment and repairs on furniture.

Cost of Hospitalization.....$17.01

This includes salaries of physician, oculist, nurses and housekeeper, drugs and miscellaneous supplies for use in hospital exclusively.

Non-Educational Costs per

Pupil Basis.....$443.41

This includes all expenditures except teachers' salaries and supplies for instructional purposes.

NON-EDUCATIONAL COSTS PER PUPIL BASIS IN RESIDENTIAL SCHOOLS FOR THE BLIND

HARVEY BLANTON
Maryland School for the Blind

In arranging the A. A. I. B. Convention program, Mr. W. G. Scarberry, Chairman of the Executive Committee, included a business management session and appointed as Chairman of this meeting Superintendent Leslie M. Hays of Iowa.

Superintendent Hays in turn requested four schools to prepare for panel discussion, papers outlining the per capita cost of operating institutions for the blind in the United States.

The topic under discussion was divided into three categories, as follows:

(A) Office and Administrative Cost
(B) Janitorial Service Cost
(C) Cost of Engineering Service

In preparing this paper the question of assembling the proper data, how many schools should be included and should comparisons be made as a whole or should they be considered from the standpoint of geographical location, faced your humble servant. In order to secure the proper data a circular letter was mailed to each residential school seeking its per capita cost on the three divisions as outlined above.

It occurred that sectional comparisons of "Non-Educational Costs Per Pupil Basis" might be interesting. The geographical distribution of the twenty-nine schools supplying data was as follows:

New England and Middle Atlantic States 3
Central 9
Southern 7
Western 10

Of these, seven schools were unable to supply figures due to the following reasons:

(A) Do not have time.....1
(B) Impossible to segregate costs desired from system of accounts used in our school.....4
(C) Dual schools—no break-down in costs between the School for the Deaf and the School for the Blind.....2

Six other schools sent reports giving total dollars expended; therefore, not having the number of pupils enrolled it was impossible to arrive at even an estimated average per capita cost. The following table reflects the tabulated results of "Non-Educational Costs per Capita" in Residential Schools for the Blind:

	New England and Middle Atlantic States	Southern States	Central States	Western States
(A) OFFICE AND ADMINISTRATIVE COSTS	204.00	197.93	210.00	94.98
	82.91	289.55	103.51	
		39.35	82.22	
		216.66	108.00	
		235.00	66.40	
		51.50	136.00	
	286.91	1,029.99	706.13	94.98
(B) JANITORIAL SERVICE COSTS	16.20	15.33	51.15	24.97
	12.81	8.89	42.57	
		5.54	6.11	
		22.00	18.00	
		12.00	34.85	
	29.01	63.76	152.68	24.97

(C) COST OF ENGINEERING SERVICE	183.00 261.14	176.46 224.30 22.58 268.09 82.00 64.75	76.65 104.50 42.65 154.00 149.50 206.00	132.13
	444.14	838.18	733.30	132.13

Average per capita cost of schools reporting:

	New England and Middle Atlantic States	Southern States	Central States	Western States
(A) OFFICE AND ADMINISTRATIVE	143.46	171.66	117.69	94.98
(B) JANITORIAL SERVICE COSTS	14.51	10.63	25.45	24.97
(C) COST OF ENGINEERING SERVICE	222.07	139.70	122.22	132.13
TOTAL	380.04	321.99	265.36	252.08

From the above figures if the results are indicative of actual costs, we may conclude that per capita costs for non-educational items are higher in the New England and Middle Atlantic States than in the Southern, Central and Western areas with the latter states following in order named. The average non-educational per capita cost of the fifteen schools considered in this report amounted to $304.87.

This is, I believe, the first business management meeting of this kind the A.A.I.B. has ever included on its program. I am convinced that the schools for the blind should adopt a unified system of accounts.

We must not overlook the fact that during the past decade drastic changes have taken place in the economic and social structure of the world, many of them directly affecting the management and operation of our schools. It is doubtful we will continue to escape the many changes which has been imposed upon business since the advent of the New Deal.

Further, I do not believe it possible to survey any school without making both an educational as well as a financial survey. It goes without saying that one is dependent upon the other. The financial survey would be facilitated if every school adopted the system of accounting previously mentioned. Even if the management should be totally uninterested in operating statistics, it is still absolutely essential to keep much more detailed records than ever before, if only to have available the data necessary for a comparative analysis of costs in institutions such as ours. To meet these conditions, schools with primitive and inadequate methods of bookkeeping should install proper accounting systems. The systems used in our schools today are not due to the management but in many cases due to information required by the various State Boards of Control, etc. etc. These State Boards have made mandatory the assimilation of certain data and in order to give the desired results our schools have, to a certain degree, been forced to deviate from the principles of accounting practice used in business organizations.

The methods and techniques referred to are simplified in the sense that they require a minimum amount of effort in proportion to the results which would be attained.

Such a system would give us greater administrative efficiency and the elimination of waste.

In conclusion, I should like to recommend that the superintendents and principals seriously consider the feasibility of adopting a unified system of accounts, and if possible invite further discussion of this important phase of our work at the next A.A.I.B. Convention.

I wish to thank each of you for your most generous cooperation in supplying the data used in this report and to those present with whom I had the pleasure of discussing this problem for your wise counsel.

SECTIONAL MEETING — GENERAL SCIENCE JUNIOR AND SENIOR HIGH SCHOOLS

WEDNESDAY AFTERNOON, JUNE 26—2:00 TO 4:00 O'CLOCK

F. E. DAVIS, Arkansas, Chairman

"SOME WAYS OF TEACHING ATTITUDES AND METHODS IN SCIENCE"

PAUL C. MITCHELL
The New York Institute for the Education of the Blind

Modern education and pedagogical theories agree that the desire for a knowledge and experience of any subject shall be supplied by an ambition arising in the being of the pupil, whatever may be the indirect motivation. The most intense motivations are the ones which are born out of experiences of the present. The pupil has neither the vantage point nor the ability to see his educational pattern as a life plan and it is not necessary for him to acquire a complete picture of the situation in order to be a good student and a normal human being.

On the other hand it is necessary for the teacher to see each daily experience of the pupil as an integral part of the pupil's life—an integrating process of life itself.

Whether or not the pupil realizes it, the science realm is an ideal place for developing proper attitudes and methods of life. This follows because of the nature of the subject. Science, as taught in the modern school, deals with a world of real objects and the larger relationships of life are emphasized as it concerns these objects and human beings.

High schools throughout America, both for the sighted pupils and for the blind, have accepted the following general aims in teaching science:

1. Enrichment of life by participation in a modern democratic social order.

2. To create an understanding of common natural phenomena by simple study and explanations.

3. To create an understanding of some common devices such as the radio and the aeroplane.

4. To lead the pupil into a way of life, to provide . rich and meaningful experiences.

5. To create an understanding of some of the fundamental and common laws of nature and the underlying principles of the world in which we live; for example, Newton's laws of motion, the conservation of energy, and the cause of thunder and lightning.

6. To give some appreciation and ability in the use of scientific methods.

A study of these aims will show that the attitude and method to be pursued are definitely outlined by the nature of the ideal to be sought. The philosophy of the teacher is the important starting point. Once the science class has a teacher who is not a pupil of **defeatism**, but a person of sensible **optimism**, then textbooks, equipment and classroom appointments assume real value and importance.

The attitudes are best taught by approaching the science curriculum as a "way of life", a sort of "life together" relationship between teacher and pupils. For example, important science problems in schools for the blind should be worked out by pupils and teacher. Such problems may involve important research work in developing models, diagrams, cross-sections or the problems may concern the ordinary every day questions of individual pupils.

Projects and the Unit Method in science are recognized avenues of approach. Each project presents its problems in much the same way that all experiences of life present themselves.

Coordination of the science subjects with other school activities lends an air of realism and a pulse of life to the work. General science may tie-up with arts and crafts, woodwork, geography and similar subjects in a multitude of ways. Physics is important in understanding household electricity, the radio, and all types of mechanical devices. Chemistry and biology are important fundamental subjects applying to all phases of life, in school, in the home, and in the community.

In carrying out an enriched science program, the following specific objectives should not be missed by the pupil:

1. To acquire ability to understand and read science language; for example to know what a radio commentator means when he mentions the electron or photosynthesis.

2. To explore the wonders of science.

3. To correct superstitions and false ideas about the world in which we live.

4. To acquire respect for scientific authority and to learn to recognize truth.

5: To develop interest in an avocation.

6. To create a wide personal "horizon"; to acquire a genuine understanding of the universe and man's place in it; to "see" the entire world and the interrelationship of all peoples.

Science for the blind should be "life", not a preparation for life. If this is the attitude and method to be followed then the pupils' motivation will be a vitalizing force of the present rather than the wished-for dream of some future achievement. A true attitude toward life does not discredit the experiences of the past. And it does not set aside the meaning and value of the present as it may concern the future. But, life itself for most pupils involves only the present. Therefore, the safest method of teaching science and the soundest pedagogical attitude is to approach science study for its life giving truths, for its definite factual knowledge of the universe, for its respect and recognition of educational authority, and for its attempts toward an unbiased approach in discussions and problems.

"THE IMPORTANCE OF A LABORATORY IN SCIENCE CLASSES —WHAT SHALL BE IN IT?"

R. E. LONG
Wisconsin

I stand before you to give my ideas somewhat reluctantly. I thought, until recently, that I had been excused from this assignment. Rather than let Superintendent Davis of Arkansas down at the last minute, I decided to carry out the assignment to the best of my ability and let the consequences fall upon my own shoulders.

My reluctancy has been prompted by the fact that I have been at the Wisconsin School for the Blind for only two years and have never attended a convention of the A.A.I.B. In addition to this, I know there are others whose opinions would be valued more highly because of their long experience and previous accomplishments.

In passing, let me add that I see nothing mysterious or fantastic about the education of the blind if we are willing to ignore the impossible. This is a field of work that, like all others, requires an application of intelligence and common sense and a willingness to put in hours of good hard work. These, and the ability to make adaptations, will pay dividends in terms of understanding and accomplishments on the part of the blind.

The world of today thinks in terms of science as never before. Every walk of life has been influenced by the steady, forward march of the research workers in their laboratories. This influence is being reflected by the constantly-increasing attention given to the teaching of science in our schools. In our higher institutions of learning we find the specialized research worker doing the reconnaissance work in all fields of science. The ultimate results will, in all probability, change the world of tomorrow considerably—for example, in the curing of cancer.

The progressive school of today is in the process of developing a unified science course from the First Grade through the High School that will give every boy and girl as much information about his scientific environment as his "basket" will hold and as much practical experience as possible with those things that are closely related to his immediate surroundings.

The laboratory, or that place where conditions or situations are provided that will permit the laws of nature and science to function, is indispensable to any class in science. A science class without the enthusiasm of a scientific-minded teacher and without opportunities to observe the actual working out of facts taught can easily become a period to be dreaded by boys and girls. Naturally, the type of laboratory work given will vary according to grade level, objectives of the course, and to the ability of the individuals; nevertheless, the laboratory work can be a powerful force in stimulating a desire on the part of the pupil to devise and use apparatus, to set up conditions and situations in order that the science course may be extended into life situations as a means of making life more meaningful as well as providing an opportunity to develop character while engaging in leisure-time activities.

How can we teach the youngster to ask "How come?" and "Why?" unless we give that child the experience of seeing laws and theories come to life? To appreciate the fact that back of certain events or outcomes there are contributing factors and to be able to reason out or to discover those factors, is foundational in developing scientific and chronological thinking; for example, the far-reaching influence of sunlight in the process of photosynthesis and in the prosperity and well-being of mankind, all leading to the realization of the energy received indirectly from the sun.

As to what should be in the laboratory depends entirely upon appropriations, the viewpoint of administrators and teachers, and the ability of teachers in substituting tactile aids. At the present time I am willing to be branded as an impractical idealist by some in order to assure myself that blind boys and girls will have an opportunity to broaden their scientific vocabulary, to "feel" the laboratory situation, and to absorb an indeterminable mass of information through the explanations and observations of their classmates who can see enough to carry on a great deal of the laboratory work that might be done by those with normal vision. I think that we must agree that there is a lot of purely verbalistic learning involved in this philosophy, but I'm also wondering if the same might not be true in the case of many of the sighted boys and girls? Is it not true, also, that one's scientific knowledge is usually judged in everyday living in terms of verbalistic manner rather than in the ability to do laboratory work? Study some of our standardized tests and also our college-entrance examinations.

In view of the above philosophy, I believe that our science laboratories should contain all of the apparatus adapted wherever possible that would be found in any splendidly equipped school. In addition, I would make an effort to bring every possible aid to the visually-handicapped child in the way of original apparatus as only the resourceful teacher can conceive. I think we should make a real effort to acquire models of every conceivable object, plant, animal, theory, etc., that we can lay our hands on. I know at our own school that we are grossly lacking in supplying these aids that help youngsters get the proper concepts of their environment. Probably this is true of other schools. One might also question whether or not this type of a thing comes under the heading of laboratory equipment; however, in my own thinking, when we are dealing with totally blind children, we must broaden the use of this term "laboratory".

I realize that every laboratory is always in the process of being built. It takes years to accomplish our objectives in building up a laboratory and in devising ways and means of transferring ideas to the blind. We should not be discouraged by our seemingly fruitless efforts. I am sure your efforts have been anything but fruitless.

I realize that specific illustrations have been omitted in this discussion, but after all you are teachers of science and I feel that if we agree in philosophy, details will be taken care of in our everyday teaching.

As I have stated previously, the type of laboratory work will depend upon the objectives of the course. General Science courses can well make use of teacher demonstrations accompanied by lectures. All should have experience with apparatus. Other more technical courses should make use of more individual group experimentation, distributing the available sight properly.

I would also deem it advisable to stress some units of laboratory work over others; for example, heat over light. Sound units would appeal to blind boys and girls more than a prolonged unit on the solar system. It would be better that some of you should tell me what particular phases appeal to the visually-handicapped boys and girls. I would not say that their interests should be the all-determining factor, but it should play a prominent role.

If this philosophy of subjecting our pupils to the same laboratory conditions as sighted boys and girls is sound, then it should stand up "under fire." This experience has given me an inspiration and a desire to set up a research problem working with our local sighted High School. Probably at our next meeting I may have a confirmation or a denial of my present belief.

The unified courses of today's schools will enable our students to do more laboratory work in the upper grades of the Junior High School and in the Senior High School. The units of measurement, for

example, will be more common to students. The laboratory should be equipped so that the elementary grades are able to carry out some experimentation in connection with their elementary science classes. As is the case of so many experiments, much apparatus can be devised or obtained from existing sources.

Not so long ago my own little boy in kindergarten asked to take a tin can and a few beans to school. In a few days he brought a growing plant home. This experience of his has been extended so that at the present time he has his father and grandfather enlisted and devoted to the raising of a small vegetable and flower garden.

These activities, as they are carried on through the grades, will make the laboratory work in our Junior and Senior High Schools more profitable because the initial novelty will have worn off and the fact that these pupils should have a much more adequate scientific vocabulary and more of the fundamental concepts of measurement, etc., will enable the teacher to devote more time to the techniques and actual work in the science laboratory.

SECTIONAL MEETING — HISTORY
JUNIOR AND SENIOR HIGH SCHOOLS

2:00 TO 4:00 O'CLOCK

DONALD W. OVERBEAY, Kansas, Chairman

"THE FUNCTION OF HISTORY IN THE MODERN WORLD"

DONALD W. OVERBEAY
Kansas School for the Blind

"History deals with the development, the ideas, the customs. the morals, the achievements of those who have lived before us." (p. 394. Education. Mar., 1938) One can hardly hope to understand any phase of this complicated present unless he has learned something of the past out of which these present conditions have grown.

There are still those who demand that history shall first of all be literature. There are others, the majority of schoolmasters among them, who demand that history shall first of all be lessons in morals, or patriotism, or social service. There are others, and here must be included a large part of the legion described as "the general public," who demand of history only that it be interesting. To many of these the very idea of scientific history with its destructive criticism, its denial of the right of personal bias, and its sober gray of facts, amounting in some cases to a mere balancing of probabilities without definite conclusions, is somewhat repugnant. Special students of the subject, however, as a rule now conceive of history primarily as scientific history, and scientific ideals influence, if they do not altogether control, most of the historical scholarship of our time." (p. 27. Education. Mar. 1938.)

At no time in modern times has education ever had a more vital function than to teach the real meaning of democracy and Americanism. "Democracy is not only a form of government but it is much more. It is a way of life, a kind of society in which human life is sacred, human personality of measureless value. It is a social order in which each man and each woman shall be able to attain to the fullest stature of which they are capable." (p. 325. Feb. 1940. Education. J. T. Adams.) "Without concern for indoctrination, we can teach honestly and enthusiastically. As Americans we have been granted rights that can be found nowhere else. We have

assurance from competent authorities in the field of research who give us data which justifies the conclusion that in the present period of our national history one of the greatest and most important privileges of teachers in all schools is to explain to pupils clearly and convincingly the concept of the totalitarian philosophy of the submergence and sacrifice of the individual for the perpetuation of the state in the state for the benefit of the individual. Our embryo citizens need to understand, in so far as their experience makes possible, the blessings that are enjoyed in a democratic country in which freedom of speech and the freedom of initiative are limited only when they infringe upon another citizen's freedom in a country striving to provide for all its citizens: equity of opportunity and education, freedom to worship God according to the dictates of one's conscience, opportunity to enjoy a standard of living and a degree of comfort seldom surpassed or even equalled." (p. 334. Feb. 1940. Education.)

In the light of present events we must also stress that to keep the blessings we possess in such abundance, we must be willing to sacrifice as we have never sacrificed before. With the totalitarian hordes on the loose it would be stupid not to prepare our youth for the great changes which are certain to come to our economic and social world. History's dominant present function is realistic preparation of all for the immediate future—a not too bright one.

Purely objective history is impossible—not only impossible to write but still more impossible to teach.

One may write the history of a nation from a friendly or hostile viewpoint and make only accurate statements in doing so. A false impression will be given, however, by the omissions made. A vital function of history then is to make people aware of propaganda.

Teachers of history are not called upon to decide whether there should be propaganda, but, rather, how much, how organized, what kind and whether an attempt should be made to free pupils from its influence by teaching methods of arriving at impartial judgments. To be able to analyze propaganda one must knowingly experience it. We can hardly be expected to progress unless we are open minded on all questions, willing to read and to listen, and able to select, after due consideration, the hidden truth. All this implies diversified propaganda, research, debate, critical judgment, and logical conclusions. Only through much propaganda can one be rendered immune to propaganda.

"In the popular and narrow sense, propaganda has meant the attempt, by hidden and unfair means, to indoctrinate with a particular belief considered profitable to the person carrying on the propaganda. But it is inescapable that some general philosophy — legitimately called indoctrination—is behind our selection of facts, generalizations, and attitudes to be acquired in school." (p. 82. Feb. 1940. Education.)

Few great achievements have ever been attained between or within nations seeking to destroy one another. Only a world at peace can be expected to advance politically, socially and economically. So while we, as history teachers, labor to make our pupils aware of the effects present events may have on us, nevertheless, we can anticipate peace and impress them with the need for desirable attitudes toward peace.

If we are trying to achieve the permanent inculcation of an attitude of tolerance toward races other than our own, we are engaged in propaganda toward that end. This and other concepts of indoctrination and propaganda imply a planned education that consciously attempts to shape pupils according to a preconceived model. It is much better to proceed along such definite favorable lines, for by so doing, children are protected from generalizations that have no substantial foundation.

"We all favor improving the ability of the pupil to think realistically about society, for it seems improbable that the quality of citizens in a democracy can be

increased substantially without the influencing of critical thinking. For that reason among others, it is generally assumed that indoctrination with attitudes of racial, religious, and political tolerance, the teaching of historical method, and the development of the habit of suspended judgment until a reasonable amount of evidence is available all result in a more desirable citizen. Were these qualities not a part of the democratic ideal they would still be justified because they increase the citizen's ability to think realistically about society.

"Where objective proof is not possible, and where no generally acceptable moral standards are available, what other specific attitudes can be designated as suitable for general indoctrination? Here we might begin with choices deemed possible and desirable. Personal preference, however, favors the following somewhat different expressions:

"Favorable attitudes toward all qualities of mind that improve the individual's ability to think realistically about society.

"Favorable attitudes toward policies that do not involve the loss of human life or the increase of human suffering over all policies that do, no matter how remote the people to die or suffer are from the pupil in time, space, or social environment.

"Favorable attitudes toward the preservation and enlargement of civil liberties in their most complete forms." (p. 83. Feb. 1938. Social Education.)

History ought to slight military revolutions and emphasize industrial revolutions. Let the military leaders fall into the background while giving industrial leaders a prominent front position. If we, through history, expect to educate for peace, we must let Peter Cooper, Jane Adams, Thomas Edison, Edward Jenner, Galileo, the Curies, and Beethoven supplant Napoleon, Sheridan, Lee, Grant, Garabaldi, and Bismarck. Any program to promote peace must include plans to break down social prejudice and intolerance in all its forms and to build in its place not only respect for others but a feeling of interdependence.

No war could be waged, if people had a genuine regard for human values. No war could be pressed for economic reasons, if rulers considered a human life worth more than a gallon of oil or a ton of coal. No ruler could let his people engage in a fight that enriches the few and impoverishes the many, if they placed the happiness of contented families above the value of the dollar. We must help our young people to see that there are other types of bravery than that which is displayed on the battle field. We must lead them to recognize moral courage as a finer virtue than physical bravery. Pasteur risked his life to find a cure for certain maladies. Galileo suffered imprisonment because he dared to advance a scientific view that we take for granted now. If our histories emphasize the life and work of our great contributors instead of our powerful destroyers our youth may come to realize that moral courage is bravery of the highest type.

"What role may history play in education for political citizenship? We live in a virtual laboratory of functioning politics. Every era of history has had its political bosses. Their effect upon the annals of history, trends in government, policy making, and all the inner workings of every period in the past and present, are too numerous to list. Why then do we remain aloof from political 'bossism', when it is he who sits at the controls of our federal, state, and local government? Should we not take advantage of this ever working, ever apparent laboratory of history and encourage our pupils to find out for themselves the part played by the politician in local government, the ways in which he maintains his controlling position, and the rewards of his job?" (p. 391. Sept. 1939. Social Education.)

Through an understanding of the boss and his works one is bound to dig into the character of the political party, to understand its functioning in our democracy, as well as to discover the methods of manipu-

lating it and the rewards of such successful manipulation.

An important function of history is to aid in implanting in young men and women a sense of their personal responsibility in making politics a primary avocation, to bring home to them the fact that the franchise involves not only a privilege and a right but also a definite responsibility requiring expenditure of time and personal effort.

Whatever we may think of politics it is through politics and political parties that a democracy must function. Instead of conditioning young people to the idea that politics are dirty and, therefore, to be avoided, we should acquaint them with the essential role played by political parties, with the means whereby they have been and are manipulated, and, most important of all, stimulate in them a sense of obligation to join the political fray. Through history we can motivate, stimulate, and arouse. If we are to maintain a true democracy, if we are to eliminate inefficiency and waste, a great number of people must rouse themselves from their lethargy and participate more actively, more directly in government. We can no longer be satisfied with a populace which votes by proxy.

We can do no better than to accept the axiom of Pericles, who said, "He who takes no part in public affairs is to be regarded not as one who minds his own business but as one who is good for nothing." Self-government involves paying a price. Can we breed a generation of young people who are willing to pay the price? If not, our educational system, our folkways, our morals have failed in this, the most important task of a working democracy and of a permanent democracy.

We may say that history has many functions not already considered here. All possible functions of history should be considered from as scientific a viewpoint as possible, though it is impossible to avoid indoctrination in these modern times —indoctrinating toward a philosophy of life based upon Americanism as the political way of life, if such indoctrination includes those favorable attitudes implied by the term "democracy." Through history we can educate our citizenry toward a more realistic understanding of this modern world; we can educate for a progressive enrichment of the child's understanding of various groups, classes, peoples and races, their beliefs, ideas, prejudices and aspirations, their methods of work and play, their customs, traditions, and institutions, their leaders, their problems, their conflicts. We can educate them to form the habit of weighing values, and of choosing values to which they can hold in the midst of confusion and conflict. We can plead for a more active participation in politics—for political citizenship.

SECTIONAL MEETING

KINDERGARTEN, FIRST, SECOND, AND THIRD GRADES

WEDNESDAY AFTERNOON, JUNE 26—2:00 TO 4:00 O'CLOCK

MRS. MAY HAMMOND, Michigan, Chairman

"WHEN AND HOW SHOULD BRAILLE WRITING BE TAUGHT?"

GRACE BADGLEY
Ohio

You will notice that I have changed the form of my subject from what seemed to promise a statement of facts to a question, and you will guess right off that it is because I know myself to be an authority neither as to when or how to teach Braille Writing. However, I do admit to rather definite opinions in the matter of both, based upon experience, observation, and the very most modest kind of a beginning

of research. I shall give those opinions for what they are worth, and I am truly sorry that I can not be there to benefit from your discussion.

The beginning research of which I spoke consisted of giving writing tests to a hundred and twenty-five children throughout the grades and high school here. Later I should like to have those same tests given to similar groups of children in other schools for the blind in order to give a broader field and greater opportunity for comparative study.

Some of the questions which I hope this wider study may help to answer are: How soon should the beginner be introduced to Braille writing? How should this introduction be made? Is there a best position for slate and stylus? Is there any one method of teaching Braille Writing which will promote the maximum accuracy and speed. And through how many grades of school should actual instruction of Braille writing be continued?

In the preliminary study among the children of our own school, I started with the premise that accuracy is the most important consideration in Braille, as in any other writing. I noted the kind of errors occurring most frequently and tried to determine whether these errors were the result of carelessness on the part of the child or of faulty instruction.

I found that the most common errors are caused by omitting dots or the insertion of extra dots. Second in frequency of occurrence were errors having to do with contractions in grade one and a half. For instance, failure to make use of possible contractions, ignoring syllables in the use of contractions, and, in all too many cases, even among upper class pupils, simply misusing one contraction for another. My greatest surprise in the whole survey was to find how little difficulty the middle dots occasion after the first struggle with it in the beginner. My greatest disappointment came from the many instances which I found of using the wrong side of the cell. That is, a was made in place four instead of in place one, etc.

When I came to the question as to why our children do not write Braille more accurately, I could face it squarely to the best of my ability, for I am a teacher of Braille writing. I honestly think that a great deal of the trouble arises from carelessness or thoughtlessness or, perhaps, too great striving for speed in the writer. The main reason why I say this is that the child does not always make the same error, proving that he knows better. Still this is not always true. Consider the instance of the upper class girl, who invariably makes her a, k, l, one the left instead of the right side of the cell. She told me that she had always done so. It is inconceivable that any teacher misdirected this girl, and yet, in some way, she did form a misconception. Perhaps as has been true of others, she learned a little about Braille writing herself or with the inexperienced help of another child, before being properly initiated by a competent teacher.

This thought suggests my answer as to when a child should be taught to write Braille. He should certainly never begin to teach himself. No matter how young he is or how recently he entered school if he has a real desire to learn to write Braille, he should be given a slate and stylus with careful instruction in every respect. Nothing should ever be taken for granted when it comes to a child's learning to write Braille. If when the very young, or, for any other reason, unready for writing child, finds after a beginning that he does not care about Braille writing after all, he should not be forced to continue at that time. Every normal child wants to write when he is ready and is given proper incentive. I should imagine that rarely should a child be taught Braille writing before his second or third year in school. At the very best, learning to write Braille for the little blind child is not the simple and interesting activity which the sighted child enjoys in making lines and curves with his pencil.

When actual learning of Braille writing has begun, I should say that two or three years are not enough to complete its mastery. College students study penmanship,

and yet our schools for the blind expect to turn out accomplished Braille writers from the fourth grade. For use and for pleasure so far as blind children in general are concerned, it is clear that the academic classes offer nothing so important as Braille reading and writing. Yet, think how much more time is given to mathematics, for example, than to either. Of course, we may reasonably assume that five or six years of instruction in reading should, if ever, produce efficient readers; but schools for the blind, so far as I know give much less time to writing. The assumption seems to be that when a child has learned to make the twenty-six letters with the seventeen contractions, and can achieve a few perfect sentences, he will go on and practice at his own behest until he has formed right habits of thinking correctly on paper; but results of my experiment lead me to the conclusion that far too little time and attention is given, first, to the actual mechanics of writing, especially to the contractions, and, afterward, to putting into supervised practice what has been learned.

So far as I know, there is no one method of teaching Braille writing. It is, of course, an individual process, and I have found that the manner of approaching it varies of necessity with individual differences among children. For instance, I had a bright little girl and a bright little boy of the same age, but the little girl had enjoyed a normal preschool life, using her hands and her mind quite naturally in work and play with other little children, while the little boy spent his time with coddling grown-ups. In reading, spelling, language, and nature study, these two children were just about equally apt, but Braille writing was a different matter. The little girl required very little more than a careful explanation of the one, two, three, four, five, and six dot numbering system. From the beginning she wrote with ease and pleasure, holding her stylus between the thumb and second finger with her first finger across the top, as I have found the majority of the good writers of my acquaintance holding it. As for the little boy, he insisted upon grasping his stylus tightly in his fist and punching with all his might. In the beginning, he wanted to write just as much as the little girl did, but he found the learning so difficult and so slow that he often lost interest. First he learned to make railroad ties, as the children call the six points that fill a cell. The upper and lower dots were bad enough, but the middles were so much worse that he told me one day that he did not believe he wanted to learn to write Braille. The next day a miniature post office was brought into our classroom. It happened that this little boy's father is a mail man, and when the other children began talking about writing letters to each other and sending them through the post-office, those middle dots seemed worth conquering. They were conquered and so were the other steps in learning to write legible Braille, but not one of them came quickly or easily.

I am really not trying to drag my favorite grievance, namely, the unnatural preschool life of many of our children, into the discussion by naming it as the sole cause of this child's writing troubles. Frankly, I do not know all the contributing causes. All that I should point out here is that there are and must be almost as many ways of teaching Braille writing as there are children to be taught. Yet, there are certain rules that I have found for my own guidance. Some of them are a summary of other things said earlier in this paper:

First, be very sure that no child forms incorrect writing habits from the beginning, or, stating it positively, and I can not overstate it. See to it that he forms right habits, such as placing his dots on the right and not the left side of the cell in forming such letters as: a, b, k, and l. The capital sign, which is dot six is frequently erroneously written dot three. As soon as Braille grade one and a half has been learned, the proper use of all of its contractions should be insisted upon. This means treating as errors to be corrected in writing grade one and a half failure to use any possible contraction and the

misuse of any contraction. In other words, teach the child to use grade one and a half contractions properly, and then clinch your teaching by seeing to it that he does use them and use them properly.

My second rule is based upon a firm conviction that Braille writing is second in importance as a tool subject to be used by blind children only to reading, and it is more in the nature of a recommendation. It is that classes in Braille writing should be continued, at least throughout the grade school, and, in special cases, through high school. I would not recommend that more than one grade of Braille be undertaken at any one time. Grade one and a half should follow thorough mastery of grade one, and grade two should not be taken up until grade one and a half has been, not only well learned, but also well used. It may be well to have certain goals set, as begin grade one and a half in the second grade of school or grade two in the sixth or seventh, but these goals should not be arbitrarily insisted upon for all children unless all children are ready for them.

Braille is a beautifully systematized and growing operation. Each succeeding grade is built of and upon that which went before it. Each makes use of all that preceded it and adds something of its own to the whole. In a way it is like higher mathematics, comparatively easy if learned naturally by consecutive stages, but bringing only confusion if one should start with algebra or geometry before mastering simple addition and subtraction.

An Abstract of the paper by Grace Badgley of the Ohio State School for the Blind on the subject When and How Should Braille Writing be Taught?

This paper is based in part upon the beginning of a study of Braille writers and the teaching of Braille writing in the Ohio School. It is hoped that this study will help in answering the following questions:

First, At what stage of a child's school life should he be taught to write Braille?

Second, What are the best methods for teaching Braille writing?

Third, Is there a best position for slate and stylus?

Fourth, What are the chief causes of inaccuracies in Braille writing, and how may these causes be removed?

Some conclusions reached from the study thus far are:

Too few of our children can be said to be really good writers of Braille.

Second, The nature of a majority of errors made would seem to indicate carelessness, nervousness, or, perhaps, too great striving for speed on the part of the student, but this is not always the case. Such errors as forming characters on the wrong side of the cell, for instance, the letter "a" as dot four instead of dot one, or the capital sign as dot three instead of dot six, show that the child, somewhere in his writing experience, more probably in the very beginning, has been permitted to form erroneous habits, which have a tendency to recur, regardless of subsequent correction and good intentions. This leads to my

Third Conclusion, No child should ever attempt to begin the learning of Braille writing except under the careful instruction of a competent teacher. A right beginning is all important. For this reason my

Fourth Conclusion, A child should be given his first lesson in Braille writing when he is ready for it. In addition to other things, this means when his desire to learn is sufficiently strong that he will take it up himself or with the help of another child if you do not teach him.

Conclusion Five, However, The second grade seems soon enough to begin the teaching of Braille for the majority of children.

Conclusion Six, There would appear to be almost as many ways of approaching the teaching of Braille writing as there are learners. Each child requires somewhat different treatment.

Conclusion Seven, The learning of each consecutive grade of Braille should be begun only when the preceding grade has been thoroughly mastered.

The paper closes with the recommendation that more time throughout a greater number of school terms be given to supervised Braille writing, the time varying according to the actual needs of the child and that the maximum degree of skill in writing be insisted upon for each individual.

"LANGUAGE PROBLEMS"

MRS. ALMA REID
Iowa School for the Blind

One of man's most important activities is concerned with carrying on the communication of ideas. This is done for the most part by the several different uses of language.

One of the very important duties of the school is to teach those uses of language which will best enable the individual to communicate with others. He must know how to speak and write in order to understand the ideas of others presented in printed form.

To meet these needs the elementary school has placed in its curriculum a group of subjects or activities usually referred to as language arts, spelling, composition or language, writing, reading, literature.

The oft quoted, "Language is caught, not taught", has an element of truth in it. Everyone knows the difference between the language of a five year old in a cultured home and th language used by a five-year old in an illiterate home. Neither has been taught any language. Each speaks the language he has caught from his home, street, and associates.

But parents and teachers cannot hope that good, clear, distinct speech can be "just caught". It must be taught.

The fact that language is catching to a certain degree should be used by the teacher to the advantage of her pupils. She should expose them to the kind of language it is desirable for them to catch.

Someone has well said, "No one should be employed as a teacher in the public schools of America who does not speak the English language contagiously well."

The teacher who speaks the language of her country "contagiously well", will overcome, for the sake of her exposed pupils any peculiarity or impediment of speech she may have acquired.

A young teacher felt aggrieved when her principal criticized a slight lisp in her speech. "I have spoken so since I was a child," she answered. The principal smiled and said, "When I was a child I spoke as a child, but when I became a man I put away childish things." Within a very short time the teacher had put away her childish lisp.

The teacher who speaks "contagiously well" articulates and enunciates clearly and distinctly at all times.

After the first few days in school a child was heard saying frequently, "Cigarette, cigarette." "Why do you say cigarette so often?" asked his mother. "That's what my teacher says all the time," was his answer. "I think you didn't understand your teacher. I'm sure she didn't say 'cigarette'," said his mother. "Yes, she did," insisted the child. "She says 'cigarette' and then we all sit up straight like this," and he assumed a very erect position. Sit erect—cigarette.

Does not this little story emphasize the fact that for the sake of her exposed pupil, the teacher should be a model so the pupil

may cultivate a simple direct form of speech.

The habit-forming period, between the ages of 5 and 8, is a good time to help establish good forms of speech, and to correct the handicap of incorrect speech.

There is little evidence to support the belief that the child will outgrow baby talk, lisping, stammering, and careless, slovenly, incorrect speech.

In the primary grades our problems will be somewhat lessened if we hold to the following requirements:

1. Simple, direct, fluent speech.

2. Correct pronunciation and language form.

3. Clear, distinct articulation.

4. A pleasing, well-modulated voice. To accomplish this the teacher must plan her speech program to take care of correction of errors (etc.).

Some of the problems confronting us as teachers are:

1. What should we know about the teaching of language and spelling?

For purposes of school instruction, items within a given subject should have relative value and the school should teach first those items that have the greatest value.

A criteria to determine value: (a) By the commonness with which it is needed by people in carrying on important activities outside of school. All important items cannot be taught in an elementary school so there is need to consider the learning difficulty of the item, the worthwhileness, and permanent value of the items.

2. How should the grade placement of the items of a subject be determined? Paul McKee: "Only a little research has been carried on for the purpose of determining proper grade-placement in language and spelling. Much more in spelling than language. Nothing can be done at present in the way of accurate grade placement in language because of lack of knowledge."

3. How should methods of teaching and instructional materials of a given subject be determined?

Before the application of scientific methods to the solution of educational problems, methods of teaching and materials were largely a haphazard affair, the result of custom, tradition, personal opinion, and experience.

One method was as good as another, and no one knew what the really effective procedures were. But in recent years in most of the language arts, the situation has changed. Experimental research has determined efficient procedures and materials in reading and effective methods in teaching spelling. But as I said earlier in these remarks, very little of fundamental value has been done in language and composition.

While awaiting the results of research to determine methods and materials we must make use of those which sound educational experience has found to be reasonably successful. Methods and materials must, however, be specific. They should vary according to the item or subject being taught and the purpose in view.

4. How may pupil accomplishment be measured?

It is probable that all educational testing should be an essential part of the teaching process. Testing unrelated to the teaching that is done is likely to be useless and wasteful. Unless testing has something to give by which the teaching and learning process can be improved it becomes futile.

So-called standardized tests can be used for the purpose of measuring pupil accomplishment and improvement over small units of work. The tests must cover that work. Such informal tests are important.

Language is more than a tool of thought and should be considered more from its social organic aspect than from its mechanical and structural make-up.

Expression is social in its nature and the more we come to realize that language is social behavior, the more important becomes the various language skills. The more clearly we see language as a way

of getting along with one another, as a communication art, the greater will be our earnestness as teachers to have children acquire skill in it.

Some elementary schools make the mistake of depending upon language periods to provide all the motivation and practice needed. An adequate language program cannot depend solely upon this type of procedure. The heart of the language work will be in numerous and varied activities. Activities which must be real and important, rather than artificial and convenient, must create normal situations in which the child is led to make use of language naturally and spontaneously.

Instruction should rest upon the basic assumption that the fundamental purpose is to teach the child how to express his own ideas. Too often the child is forced to express unfamiliar ideas perpetrated by the teacher or the text book. Such a procedure tends to discouragement.

It is a significant error to do all teaching of language or composition thru activities such as excursions, projects, programs, etc. Many times this means incidental, unplanned, unsystematic teaching. The program cannot live by activities alone.

There should be a definite composition or language period in which such jobs as letter writing, conversation, story telling, punctuation and the like can be taught and practiced.

A combination of the mechanical nature of language with the social will tend toward interest and growth in this vital subject.

There are many natural oral experiences on the various age levels: dramatization, socialized recitation, and many others to make effective functional language work.

During the first three grades children are encouraged to speak easily and readily. We primary teachers must remember that any contribution at all is better than none. Form is incidental until the child has developed a conversational background. A sentence sense is also developed.

Errors must be corrected. Time of correction is a debatable question.

Paul Rankin says:

"Oral expression occupies 30% of the time spent in communication in adult life but received only 10% of the school time for the development in language. Written expression occupies only 9% of time in communication in life, but receives 30% emphasis in school."

This evidence shows we are correct in placing increased emphasis upon oral language.

These remarks cannot be closed without again directing your attention to the great dearth of accurate information relative to the improvement of our language problems.

SECTIONAL MEETING
PANEL DISCUSSION AND ROUND TABLE
WEDNESDAY AFTERNOON, JUNE 26—2:00 TO 4:00 O'CLOCK

SUPERINTENDENT F. M. LONGANECKER, Wisconsin, Chairman

"HOW SHALL WE GO ABOUT TESTING IN OUR SCHOOL"

DR. SAMUEL P. HAYES
Mount Holyoke College, South Hadlay, Mass.

This is a question we are now being asked more and more frequently, and the answer must always be "It depends". First we must know who is to do the testing; and then we must know how much interest the teachers take in the testing, so we may estimate their support for our program. I shall first suggest an optimum plan for a school where the need of testing is fully appreciated by principal and teachers, (so that there will be no question of sacrificing a reasonable amount of student time in testing), a well trained tester on the staff or easily accessible in a neighboring university who may be trusted to give our tests strictly according to directions, and a desire to modify the classification and instruction of the pupils in terms of the facts discovered through the tests. After the optimum plan I shall suggest an irreducible minimum if any testing at all is to be attempted.

In the first year of testing in a school individual intelligence tests should be started early in the fall, first testing all the new pupils and the doubtful ones, i.e. those whose class work make their teachers wonder why they cannot do better work. Then a plan should be made for testing the whole school population during the next two or three years, getting around to a retest of each pupil at least every third year. For these individual tests a minimum of an hour or an hour and a half must be allowed, and to get an early survey of the whole school in the fall it is highly desirable to use a group intelligence test, such as the Otis Classification Test, adapted for the blind and published in the Teachers Forum by Miss Ruth Sargentin 1931.

Supporting the intelligence tests, all the regular graded pupils from the fourth grade up should be measured by means of a standard achievement test. For this purpose the Stanford Achievement Test has proved highly satisfactory in a number of schools, and being offered in five equivalent forms, which show a high correlation with each other and with the intelligence tests, a five year program is easily arranged. Full directions for this test will be found in my article in the Teachers Forum in 1937, with an additional memorandum on timing in the Teachers Forum in 1939. A thorough program should also include the use of a Standard Graduation Examination at the end of the elementary school examination, such as that adapted for the blind and described in the Teachers Forum in 1939, and some standard tests for high school. A wide variety of tests now adapted for use with the blind and suggestions for the adaptation of others are described in my article Practical Hints for Testers in the Teachers Forum 1939. Further information upon the ability of blind children may be obtained also through the use of the Kuhlmann-Anderson group intelligence test described by Mrs. Fortner in the Teachers Forum in 1939.

In schools where such an extensive program is not feasible I would suggest that an interested teacher with some background in educational psychology might well give the Otis Classification Test and a few of the ten Stanford Achievement Tests, picking out the subjects in which the school is most interested. Such a teacher might well read a considerable number of the articles listed in my two

bibliographies to protect herself from falling into some of the commoner mistakes in testing. Then an outside tester, trained by some state school or agency, might be invited to visit the school, give the individual intelligence tests to a limited number of doubtful pupils and all the new ones, after which the visiting tester might well interpret the results in an informal teachers meetng.

Before discussing the results and values of achievement tests in schools for the blind, it may be well to indicate the present status of our adaptations of individual intelligence for use with the blind. The accompanying bibliography indicates the long history from the beginnings in 1914. At present we have nearly completed our 1940 revision of the Binet tests, based upon an extensive statistical study of over 2100 cases. Our charts show the distributions of I.Q.'s in 16 schools. We are trying to meet the two main criticisms of these tests (a) that no thorough-going standardization of our tests has been published and (b) that no one knows just what value to give to an I.Q. obtained by our adaptations, i.e. how it will compare with an I.Q. of a seeing child with the tests for the seeing. This 1940 adaptation will be based on a thorough standardization for the blind and the procedure published as soon as it can be written, but its relation to measurements of the seeing must still be somewhat indirect. However, we have plenty of evidence that our I.Q. for the blind is considerably high in comparison with the seeing, since the blind as we find them in the residential schools are retarded in the development of vocabulary and in tests involving reasoning in much the same degree that they are retarded by age in the grades. To supplement our Binet for the blind we are strongly recommending the use of the Wechsler Adult Intelligence Test for all pupils from 14 years up. This is the area in which we distrust the ordinary I.Q. calculations, and since the Wechsler tests have been standardized upon a considerable number of seeing adults, we may correct our Binet I.Q. and get a measurement in seeing terms at the same time. The Wechsler scale consists of a verbal and a performance series of 5 tests each, giving two independent I.Q.'s, and a vocabulary test. The verbal test and the vocabulary test can be given to the blind practically without change; the performance test can be given only to the seeing.

We are also arranging a combination of the L. and M. series of the 1937 Terman-Merrill revision of the Stanford-Binet tests, which will give a measurement of the blind in terms of seeing standards, and undoubtedly produce somewhat lower I.Q.'s for the blind, since vocabulary tests occur pretty regularly from the 6th year upward.

Another measurement of the intelligence of the blind which is now accessible is Brown's I.J.R. Point Scale for the visually Handicapped, a scale which is not only standardized upon the seeing, but has been applied to a considerable number of partially-sighted in the public schools.

Intelligence tests are used to determine what may reasonably be expected of a child and they give important help in grade classification. Achievement tests indicate how well the pupil is using the ability discovered through intelligence tests, they cast some light upon the success of the methods used by particular teachers, and they indicate the subjects in which a school is particularly successful, or the reverse.

Achievement testing has also a fairly long history, but some of the lessons learned at the beginning have not been fully appreciated. Of course it is plain that tests involving the reading and writing of braille cannot be given in grades where a fair facility with these tools has not yet been attained. In general the fourth grade seems to be the place to start such group testing. And in order to give the blind time enough to cover about the same amount of material as the seeing, they must be allowed to work from 2½ to 3 times as long as the seeing. If this time is cut down, the blind cover only the earlier items of a test, which are ordi-

narily the easier items, and thus give a false picture of their achievement. Moreover intelligence is a vital factor in the comprehension of what is read, and this is probably the reason why we find a high correlation between our achievement tests and our intelligence tests. Finally, a considerable amount of age-grade retardation is to be expected, with very wide variations in C.A., M.A., and I.Q. in each grade.

Certain high points in the history of achievement testing may be noted in our bibliography—the Manual for Self-Surveys published at Overbook in 1921, giving directions for standard tests in most of the school subjects and for two group intelligence tests adapted for use with the blind (a publication for which the schools were not ready): Miss Maxfield's Adaptation of Educational tests for blind children in 1927 and her establishment of the Teachers Forum in 1928: the use of the Stanford Achievement test at Perkins from 1935 onward with full directions published in the Teachers Forum in 1937. The Stanford Achievement series has now been used 5 times at Perkins and one or more times in a considerable number of schools with significant success, as our demonstration by curves and charts will show.

Of primary importance for the teacher are the curves for individual pupils and the curves which show the results of all the pupils in her grade. The curves for individuals show the weak points in the pupils' armor, and indicate where more attention is needed as well as where time may be saved. As each individual's curve may be easily compared with grade and age standards, the gradual elevation of low points may be a great satisfaction to the teacher when later tests are given.

Similarly curves for a whole school after several years of testing bring their special lessons. For instance the curves passed out show three tests in a single school with a decided rise in level in some subjects and little improvement in others. Both teachers and principals will be interested to ask why and how, and to make different plans for the future. The curves for 7 schools combined indicate that in all the tests except 10. Arithmetic computation, which we think is not fairly constructed at present for use with the blind, the blind test practically at the seeing grade standards, the curves running above the 100% line as often as they run below. The curves by subject where all the grades are combined tell much the same story, except that beside the dip in Arithmetic computation, another dip is often found in literature or history, perhaps pointing to a lack of enrichment in those lines to compensate for the slow and limited general reading of blind children.

In saying that the blind seem to test practically at the seeing grade standards, we are perhaps giving a wrong impression. When the results are charted by mental or chronological age we find a different picture. We have already referred to the age-grade retardation: the apparent attainment of seeing norms when sufficient time is allowed for the slower processes of braille reading and writing merely means that children have been promoted into grades where they can do the work required, and the tests merely justify their grade classification. Our next curves are based on mental age and give us a somewhat less favorable picture. Here we find the curves for all subjects and all grades running pretty consistently below the 100% line, except in the 9 and 10 year M.A. groups where other factors seem to be working (perhaps the fact that relatively bright children may form a larger proportion of the younger groups.) Even geography, which generally stands so high in the curves by grades, appears below the 100% level in curves by M.A. When curves by subjects based upon M.A. groupings are made the fallacy of drawing conclusions only from results by grade again becomes evident.

Finally, we present a series of curves drawn for examination by the fingers, for teachers without vision. Here will be found the individual curves of a bright and a dull pupil tested twice, results by grade in reading, geography, spelling and computation, results by mental age in reading

and geography, and a curve of age-grade retardation, all based on the results in one school.

What shall we do about testing? Do what you can and as much as you are able to do well. Send the results to me and I shall be glad to give you interpretations and comparisons with other schools and with the seeing. Once started a school seldom gives up testing except for financial reasons. And as in the growth of the telephone, the more centers of testing we have the wider our social usefulness.

"DISCUSSION OF DR. HAYES' PAPER WITH SPECIAL EMPHASIS ON THE INFLUENCE OF A LANGUAGE HANDICAP ON MENTAL TESTING"

MILDRED L. SCHORPP
New Mexico School for the Blind

We are grateful, all of us, for each contribution which has brought aid and assistance to the blind, or to workers with the blind. Some important pieces of work remain in the background, unseen by the public. Dr. Hayes has opened a new approach for teachers and schools by adapting I.Q. measurements to our needs and requirements. The Hayes-Binet Test, as many of you already know, has been used in many of our institutions for the blind. Dr. Hayes has made a thorough study of the results of these tests in seventeen schools for the blind, and, I understand, is making research into the efficacy of the system.

The results of the experiment in the New Mexico School for the Blind are most interesting to us and seem to confirm both what Dr. Hayes expects and what he regards as points of difficulty. According to his tables, New Mexico ranks low in measurements of: Average I. Q., percentage of pupils with I. Q. of 70 or below, and the percentage of pupils with I. Q. of 120 and above.

Several reasons might be cited as factors contributing to the above results. The vastly-scattered population of New Mexico makes it very difficult to enforce the compulsory education law. Thus, there are instances where blind or partially-blind children of twelve and fourteen years of age have been found living in some remote canon who had never attended school. It has been my experience that the environment of the Spanish child offers much less opportunity for social and economic advantages than does that of the English-speaking child.

The children of the New Mexico School are Spanish and American. Of the 90 pupils tested, only 15 percent were American children with English as their native tongue; the other 85 percent were children with Spanish as their native tongue. It is evident, therefore, that language does offer a problem and can present difficulties. Familiarity with Spanish words cannot be carried over to the corresponding English word so readily by children just learning English. Even when a child knows a word or phrase in the new tongue, it is often difficult to define, explain or adapt in the second and strange tongue. In spite of the fact that Spanish children are taught to speak the English language when they come to school, Spanish seems to be, in a large number of cases, the only language spoken in the home.

An English test to Spanish offers the same hazards for the Spanish as a Spanish test would present for English beginners. In many of the tests, language has presented difficulties, and I have found that the Spanish children scored rather low on questions which required usage and understanding of the English language. The

following illustrations will show some of the difficulties encountered by those to whom the test was given:

VIII, 4: Coins: While a knowledge of money does not involve much understanding of a language, the Spanish children had difficulty in naming the various coins.

IX, 6: Rhyming three words in a minute; A rather high percentage of pupils failed to pass this test, which is probably due to the fact that even though an illustration was given, the children failed to understand what was meant by "rhyming" words. Some of them interpreted rhyming as giving an association of words as: spring, summer, winter, fall. Others merely gave words which started with the same letter as: mill, mile, milk, and meat.

X, 6: Giving 60 words in three minutes: Many failed this test probably because of their limited vocabularies.

XII, 8: Giving likenesses: Many of those who failed this test confused "likenesses" with "differences".

XII, 5: Absurdities and XIV, 2: Fables: Again, failure to pass these tests was most likely due to the fact that the subjects failed to understand what they were expected to do. Some repeated part of the fables, some said, "I don't know", and others made no response.

XVIII, 4: Giving thought content from paragraphs which had been read aloud: Quite a number failed this test possibly because they seemed to have a great deal of difficulty expressing the ideas in their own words.

The Vocabulary test was given, in most cases, when there was no other alternative. Of the sixty-one Spanish children tested, 22 knew less than ten out of fifty words.

In the above tests, the results of the Spanish children were somewhat lower than those of the American children. In the other tests which involved use of figures such as counting, repeating of numbers forward and backward, however, the results were similar.

Three pupils who knew no English when they entered school were tested six weeks after school began. As might be expected, the scores were very low. After six months had elapsed, the subjects were retested. and their scores were considerably higher. Improvement was shown in those tests requiring a knowledge of English, as: giving differences between words, repeating sentences, giving definitions, and others.

We are forced to the conclusion that language is a factor requiring serious consideration in making tests. This is corroborated by the patent necessity of teaching the children in the realm of speech; and it is confirmed by a study of tables compiled by Dr. Hayes.

Language refers, of course, to the literal meaning as a specific tongue; e. g., the English language or the Spanish language. Diversity of language becomes a handicap factor from a more general point of view. We have referred to one, namely, the fact that children of six to fourteen years of age may be beginners in a formal school and in the same room. Here the older ones will have a tendency to read their observations and experiences into words or gestures or sighs and lilted voicings. This factor is more significant with us than in cities.

Here, too, must be considered the influence of folkways and colloquialisms. Suppose climate and home life lead a child to regard rain as a blessing and give it the same welcome other people give to flowers or sunshine. In such instance, they would regard with puzzlement the folk "who do not know enough to go into the rain". Is it, therefore, always negative testimony for a child to see nothing out of place in remaining in the rain? Habit and climate seem to attest wisdom in remaining rather than fleeing rain! If such supposition be correct, then conditions and folkways ought to be considered in framing questions or in judging the answers.

The above reference is sufficient—especially so, since some of us can remember how, in our populous East some years ago, one vessel was called a bucket, a can, or a growler; and another a bag, a poke, or a sack.

I am thankful for the privilege of sharing the benefits of this convention, and wish to state again my personal appreciation to Dr. Hayes for the helpful inspiration which he is bringing to workers in schools for the blind.

FIFTH SESSION

WEDNESDAY EVENING, JUNE 26

PLACE: MELLON INSTITUTE OF ART

"THE EDUCATION OF THE BLIND IN SOUTH AFRICA"

P. T. THERON
Head of the Handicapped Department, Union of South Africa

The time allotted to me to give you a comprehensive picture of the education of the Blind in South Africa will not allow any elaboration of the philosophical, sociological or psychological aspects of the work. I will limit myself merely to the enumeration of certain facts, hoping to do it so that you will have a fair picture of the work.

THE RACIAL ASPECT OF THE WORK

There are four main racial groups:

The European, approximately	2,000,000
The Bantu (native)	6,600,000
The Asiatics (175,000 Indians are included in this group)	220,000
The Coloureds	770,000
Total	9,590,000

In South Africa, the colored section originated from a mixture of races: European, Malay, Bantu, Hottentot. The race, designated as Coloured in America, is known as the Bantu in South Africa or simply: the native races—the same stock from which the Coloured of America came. The distinction, commonly made in South Africa is: European and Non-European. From the figures given above it is clear that approximately 20% of the population is European and the education of this section alone is compulsory, controlled and financed by the state. The education of the approximately 80% of the Non-European is entirely on a voluntary basis, chiefly controlled by missionary societies and subsidized by the Government. In 1938 there were in operation 3,700 schools for natives (Bantu) with an enrollment of 418,538, receiving a Government subsidy of approximately 1,000,000 pounds. The education of the colored section (enrollment of Coloureds and Indians: 157,093) of the Non-European population also received a subsidy of approximately 900,000 pounds.

The education of the Non-European section of the population in the particular year mentioned was therefore subsidized to the extent of 2,000,000 pounds. The expenditure on the education of the European section for the same period was approximately 18,000,000 pounds for a school population of 436,112. It is evident therefore that there is much leeway to be made up with respect to the education of the Non-European population of South Africa. If that is the case with the normal section, it needs no elaboration to show that the education of the Blind, or the physically Handicapped for that matter, will show greater discrimination. At present there is one school subsidized by the state, catering for the needs of the Non-European Blind. It is true, we have only one state-subsidized school for the European Blind, but statistics given below will at once show the much higher incidence of blindness amongst the Non-European population. To be frank, the care, educationally as well as otherwise, of the Non-European Blind is practically an untouched field, in spite of very serious attempts made during a number of years to improve matters. I may note in passing that natives (Bantu) are excluded from the benefits of the Blind Persons act. As a result, however, of representations made to the Department of Native Affairs by the National Council for the Blind 9,000 indigent Blind from 18 years upwards were in receipt of a monthly pension of approximately S 2 (10 sh.). In 1939 an amount of 60,000

pounds was paid in respect of such benefits. Blind indigent Asiatics were paid a sum of 5,000 pounds in 1938 while 1,118 Coloureds were in receipt of a pension.

The uregncy for adequate educational service for Non-Europeans is realized by every responsible individual in South Africa, and rapid progress toward a satisfactory organization will, it is hoped, be possible (now, however, we are preoccupied with war).

Another phase of the educational system which requires elucidation is that of control. There is very little local control of education. (There are some private schools but the numbers are comparatively small.) The administration of education is vested either in the State Departments of Education or in the Central Government. The relation, however, between State or Provincial Governments and the Central Government is quite different from that of the United States. At the time of the Union of the four separate states a compromise was effected between a highly centralized system of government and a federal system. The separate states were granted certain functions of which education, both primary and secondary, was the most important one. The Central Government has, however, the power of even abolishing the Provincial systems of government. But although the Central government has this power, it never really interferes with the functions of the states, especially not with the educational functions.

The Constitution delegated to the Central Government the administration of all higher education, all post-secondary education. Since 1910, however, it had to accept responsibility also for other branches, either because it considered such education of broad national importance, or because of the inability of the states to finance certain types of education (taxing powers of individual states being rather limited).

The organization of the education of the handicapped has, however, been effected only during the last five years. There was, therefore, an opportunity to benefit by the lessons learned in the other spheres of educational endeavors and a very satisfactory system of control has been evolved.

As the Provinces are held responsible for primary and secondary education, it followed logically that the education of the partially sighted, the partially deaf or the hard of hearing, the mentally handicapped (only the educables) and speech defectives should be delegated to them.

The Central Government, however, heavily subsidizes the various educational endeavors. The Provinces are subsidized to the extent of 70% of the cost of primary and secondary education, based on average attendance. In order to meet the higher cost of special education, a further subsidy on the following scale is paid to the Provinces (a per capita subsidy based on the average attendance):

a. The subnormal and non certifiable defectives L 6-5.

b. The hard of hearing and partially deaf L 15:1-8.

c. Partially sighted L 9-11-3.

The highest subsidy is paid in respect of physical defectives requiring vocational training, viz. 21 pounds p.a. The Union Education Department, responsible for the payment of this additional subsidy, reserves to itself the right of inspection of all classes or schools for the handicapped to determine, amongst others, whether admission of pupils to special classes or special schools is in accordance with the criteria laid down.

The Union Education Department further accepts direct responsibility for the education of the Deaf, Blind and the Epileptics while certifiable mental defectives are delegated to the institutions of the Department of the Interior. As already stated there is one school for European Blind.

The control of the Department over the schools is very liberal. It subsidizes them very heavily (paying full salaries of instructional staff, as well as subsidizing

capital expenditure and maintenance very liberally). The only direct control it has is in the educational sphere. Schools are subject to inspection by an officer of the Department and the Minister nominates two members to the Managing Board or Board of Directors. The Department acts in a consultative and advisory capacity rather than in a dictatorial manner. Although the Department pays the full salaries of the instructional staff, the local board has fairly wide powers. No teacher, however, can be dismissed without the permission of the Minister, while applications for additional staff have to be submitted to the department for approval. Instructional staff are allowed to contribute to the Civil Service pension fund, and enjoy full leave and other privileges. Security of office is thus insured.

Certain criteria for admission to classes or schools are laid down for the different areas of the handicapped.

There is a general criterion affecting all areas viz.: that pupils must firstly be definitely in care of special educational effort on their behalf which ordinary classes cannot provide, and, secondarily, they must be educable. In-educables are not considered candidates for special classes or special schools.

The question of the multiple-handicapped is merely shelved, because no survey has as yet been conducted. It is one of the many problems awaiting solution.

The special criteria laid down in respect of the visually handicapped read as follows:

Candidature for sight saving classes will be determined by consideration of the merits of each individual case. Children who cannot read ordinary school books or ordinary blackboard writing, or who do so at the risk of harming their sight, are usually candidates for sight saving classes. The following numerical criterion should serve as a guide:

In general, with the exception of children suffering from progressive eye troubles, children with 6/24ths vision or over in the better eye, after correction and treatment, can usually carry on their work profitably in the ordinary classes. Children with much less vision than 6/60ths, after correction or treatment, are considered almost blind and should be educated as finger-readers by means of Braille in a school for the Blind. Children falling between these two extremes, as well as children with progressive eye troubles, should be considered potential candidates for sight saving classes.

Fairly comprehensive and dependable statistics are available for the Blind. Extensive as well as intensive surveys are, however, required in order to enumerate the number of children suffering from visual defects, however slight, and who will be subjects for sight saving classes.

Sight saving classes have already been started in Cape Town and Johannesburg. War has the effect of putting a stop to such endeavors. The real problem in connection with sight preservation, facing us in South Africa, however, does not lie in the thickly but in the very sparsely populated areas. The different ways in which America settles the rural problems cannot be duplicated in South Africa. The solution seems to be in concentration of the rural cases of certain areas in Worcester, utilizing facilities offered by the School for the Blind. Suffice it to say that the problem of the partially sighted is one of the unsolved, awaiting concentrated attention at the earliest opportunity.

Class-room procedures in schools for the blind are conducted much on the same lines as here. Some specific problems are: The outstanding one is the problem of bilingualism. The South African blind child has to learn two Braille systems, the English and the Afrikaans. An excellent Afrikaans system has been worked out by the Vice Principal of the Worcester School. It is not necessary to enlarge on the difficulties facing schools in a country where two languages are compulsory. The schools do exceptional work in this respect.

The provision for an adequately trained

personnel is another very difficult problem. At present teachers are recruited from the regular schools and are then guided by senior teachers and the principals in the specific methods. The necessity for a more systematic training needs no stressing. The difficulties to be overcome will at once be evident to you. We may begin by instituting a correspondence course or conduct vacation courses.

Very closely connected with this is the lack of opportunity of instructors to exchange views and learn from other workers in the field in such conventions as you have here. The number of instructors is so limited.

A very pressing problem is the demand of the pre-school child for better treatment at home or in nursery classes. The nursery school movement for the normal child is strongly forging ahead. We do not want the blind child to lag behind. The Worcester School will shortly be able to start with a scheme which will be entirely segregated from the rest of the school and develop as an independent unit.

Mention of some of the special problems of class room procedure will be sufficient: 1. the problem of the retarded or mentally backward; 2. the mentally deficient blind; 3. the question of curricula; 4. the utilization of residual sight; 5. contactions in Braille, especially with a view to the two compulsory languages; 6. sex-education and phantasy life; 7. mannerisms; 8. fatigue; 9. the fostering of the competitive spirit and teamwork. I need not stress any more.

Another step, taken by the Union Government, which may have far reaching results, is the promulgation of a law compelling parents to send their handicapped children to schools or to satisfy authorities that adequate educational facilities are being provided. The law again is applicable only to European children.

For the sake of a comprehensive review let me just mention that the National Council for the Blind, with the aid of the Department, has interested itself in the Talking Book and a beginning has already been made with a Talking Book library. Machines for registered Blind have also been imported, in limited numbers as yet, but nonetheless a beginning. The library for the Blind, located in Grahamstown, is gradually forging ahead with the provision of books for the Blind. A number of the books of the Bible have already appeared in Afrikaans, produced in Braille.

Allow me just to mention a few other matters which, though not strictly educational, will help to form a comprehensive view of the work for the Blind.

a. Sheltered workshops for the Blind have been established in the larger cities while different societies more or less covering the whole of the country interest themselves in the betterment of the conditions of the Blind;

b. A system of augmentation of wages is in operation;

c. Systematized courses of training are in operation in vocational schools (Worcester and Athlone) and Training Centres and an Examining Board has been established.

This cursory birds eye view of the work will not be complete without some indication of the incidence of blindness. The following figures are therefore just quoted, without any extensive comment:

I. On December 31, 1938 the number of registered Blind were distributed as follows:

	Males	Females	Total
European	883	686	1,569
Colored	706	641	1,347
Native 4,536		3,849	8,379
Total 6,126		5,176	11,295

Between December 1938 and April 1939 the registered total was brought up to 12,022, the greatest increase being in respect of natives: 596.

II. Classified according to age groups we find the following expressed in percentages:

Ages up to 19 ..... 2.1
Ages up to 20 to 40 ..... 13.2
Ages up to 41 to 71 ..... 78.4
Unknown 6.3

Incidence per 1,000 of population for Europeans .78, Coloureds 1.8, and Natives 1.3. I must, however, state that enumeration, especially amongst the Non-European section is very incomplete. In certain areas this incidence is very much higher.

III. The age at which blindness occurred, given for Europeans and Coloureds only, (that for Natives being unreliable) expressed in percentages:

Ages up to 6 years..... 11.9
Ages from 7 to 12..... 5.3
Ages from 13 to 19..... 5.4
Ages from 20 to 30..... 11.0
Ages from 31 to 40..... 10.8
Ages from 41 to 50..... 11.6
Ages from 51 to 70..... 27.5
Ages from 17 plus..... 7.5
Unknown 1.0

IV. Trachoma accounts for 13% of blindness in Coloureds and 5% in Europeans.

Blindness due to industrial and non-industrial injuries amounts to approximately 10%.

Glaucoma accounts for 10%

Amongst Europeans: 67.1% of blindness is due to disease, 23.6% to congenital or infancy causes, 9.3% to accidents. Amongst Coloureds the corresponding percentages are: 83.6, 6.4 and 10.

A survey held by the Department for Native Affairs has revealed some very interesting but sad facts as regards the incidence of blindness amongst natives. I have to refrain from touching on this very important matter.

"TRENDS IN SERVICES FOR THE SIGHTLESS"

COL. E. A. BAKER
Managing Director Canadian National Institute for the Blind, Toronto, Canada

In discussing this subject I have, for the sake of brevity, proceeded on certain assumptions. First, that you know the history of education and services for the blind. Second, that you are well acquainted with present day facilities. Third, that all are anxious to serve the best interests of the blind irrespective of all other considerations.

I realize that these assumptions imply the ideal in the equipment, understanding and aims of the individual, but I still feel that such may be the worthy aspiration of all. A discussion of this subject also requires a knowledge of general conditions and the many factors which tend to influence present day thought and action as well as plans for the future.

I think we all realize that history teaches many lessons to those who will read and can comprehend. Certainly history makes clear to us many of the mistakes which were made, but for which there can be no reasonable excuse for repetition.

Again, we must realize the revolutionary change in outlook during the past quarter of a century. This has bred or speeded most of the changes. From our own experience I think we may properly conclude that changes are slower in coming and less far-reaching in their effects during normal easy going times. During wartime or times of great prosperity or severe depression, the most far-reaching and rapid changes occur.

In considering trends of modern service we may divide sightless people into three main groups: pre-school age, school age and adults. For a long time little thought was given to sightless infants and in fact usually little was known of their existence until registration by schools, service agencies, health authorities and others, brought the problem to light. Next, there

was a wave of interest and some action on their behalf, partly instigated by schools realizing the necessity of appropriate training and development before reaching school age, and partly by agencies serving the blind or children's aid authorities who realized the lack of understanding and improper conditions under which some of these infants were living. Finally, of authorities interested in the prevention of blindness who discovered that most of the cases were the result of ophthalmia neonatorum and other conditions which could be dealt with preventing blindness. A few blind babies homes were developed. My own view, which I believe is shared by most workers with a modern point of view, is that the pre-school age blind child should enjoy normal home life instead of being institutionalized at so early and impressionable an age. This may be in the home of the child's parents or in the case of lack or unsuitability of the home, then in a carefully selected and supervised foster home. We do, of course, recognize that some of these children because of other disabilities associated with blindness present a problem which it may not be possible to adequately cope with under ordinary home surroundings. In such cases institutional care may be the only alternative. In the meantime under modern conditions where proper prophylactic treatment for all infants at birth is enforced, the incidence of infant blindness has been reduced to an extremely low point. Infant or pre-school age child blindness affecting any substantial number in any community, states or country these days gives a fairly definite indication that well-known and easily applied preventive services are poorly organized or non-existent and, therefore, represent a definite reflection on those who are interested or are understood to be responsible.

I do not think it is necessary for me to discuss more than a few phases in the educational service field. I am concerned principally with adequate provisions for primary, and where applicable, secondary and college education for sightless young people. I do not propose to enter into the arguments as between residential schools and Braille or day classes. To me it is quite obvious that the residential school must be utilized where responsibility for the education of the juvenile and youthful blind of a whole district or state is assumed, since the day classes could not for practical reasons serve children of semi-urban, rural or sparsely populated areas. On the other hand, Braille or day classes may be quite feasible in large centers where there is a sufficient number in a city area to warrant and permit practical organization of a class or classes. I am quite prepared, however, to leave the question of advantages and disadvantages of each system to unprejudiced research now under way. I do, however, feel that with increasing provisions for eye care and prevention of blindness tending to reduce the incidence of blindness in the juvenile and youthful group, that we may never expect to see the elimination of the properly organized residential school for the blind. In fact I am inclined to think that in the years to come even greater stress will be placed on the more complete equipment of residential schools and on raised standards of staff members, especially in the teaching of business principles, professions, manual training, domestic science and vocational guidance. This leads me to what I consider to be one of the most important functions of a school for the blind, that is, the preparation of the young man or woman to meet the practical problems of life after graduation. By all means give each as much of the cultural equipment as can be managed, but remember that with but few exceptions the young men and women leaving a school must look forward to earning their livelihood and justifying their existence in society. If the average young man or woman with sight finds problems under present day conditions, we must recognize that lack of sight imposes a serious additional problem. Therefore, the principal way this can be reasonably counteracted is for the school to definitely study each pupil and by advice and instruction guide in that path which is most likely to lead to successful

application of talents possessed. In this the school should take full advantage of information available through organizations serving the adult blind who are most able to help find or give employment to the school graduate. Finally, may I compliment the schools on the modern trend of providing most competent ophthalmologist's consultation service for the pupils. This is for the sake of those who may come forward to the school but who may have an eye condition which would yield to treatment or correction. It would be tragic for any boy or girl to grow up to adult life under a handicap that might have been relieved in early childhood.

Next, may we turn our attention to services for the adult blind. Here we find an extraordinarily confused picture with a number of outstanding bright spots. I do not propose in the space of this paper to deal with all the ills or to suggest the cures. Actually both are obvious. I think it is sufficient to say that in all fairness to sightless adults it is a definite responsibility of service organizations that they should co-ordinate their activities in at least each state field. Some small local organizations are rendering a good service, but most of such organizations cannot afford to employ adequate experienced and capable personnel to give a comprehensive service. The service needs of the sightless adult in these days cannot be adequately met by any narrow gauge arrangement. A great deal of research is under way now, many subjects having been allocated by the Joint Findings Committee representative of your organization and the A.A.W.B., which I have the honour to represent. I am definitely hopeful that the results of more than a score of research projects will be very interesting and valuable. It will then remain for us to determine the practicability of the conclusions and the extent to which application may be possible. I hold very definite opinions, however, as to the trend which organizations serving sightless adults must follow. There must be recognition of responsibility; there must be co-ordination of activities at least in state-wide fields; there must be a development of more comprehensive services allowing greater latitude in meeting the widely varying capabilities and needs of sightless adults; there must be a definite organized system of vocational guidance to co-operate with and ensure continuity of guidance given in the schools and to more adequately serve those losing sight in adult life; there must be elimination of waste and unnecessary duplication; there must be a raising of standards for technical and business staffs since the day is rapidly passing when anyone is good enough or incompetence will be tolerated; there must be a more definitely justifiable relationship between service costs and service results. Public bodies and/or the general public who have hitherto supported are raising questions and too often there has been more than enough justification for criticism.

I represent a private organization which serves the whole of Canada and as well the Crown colony of Newfoundland. I will not attempt to review the advantages of our co-ordinated administration, financing and service activities, but simply wish to illustrate certain service trends. Our organization was founded twenty-two years ago. For some years we were absorbed in dealing with the problems of organization, early development and financing. For those who were considered employable we, of course, originally established workshops for men and women, home teaching, home industries and encouragement in individual occupations. Still we felt that there were many employables for whom we could not provide suitable opportunities. For many years we had studied the possibilities of placement in general industry and in small businesses, but it was not until about 1928 that in our search for a supersalesman with unlimited outlook, we selected Mr. J. F. Clunk of your State of Ohio. We originally stressed placements in industry, but by the time we had gotten our campaign nicely launched the depression of 1930 struck and we soon realized that we were wasting time, energy and money trying to place sightless people as new employees in industries which were reducing staffs. We, therefore, turned

our attention to the development of various types of concession stands. To-day we have more blind people employed through placement than we have in our factory departments. If you like, this is a definitely modern trend.

Years ago we realized that we could never hope to meet the maintenance needs of those who were unable, because of age or physical unfitness in addition to blindness, to work and earn sufficient for self-maintenance. Therefore, we sought and in 1937 secured, pensions for the blind. Of 12,000 registered blind in our area, of whom 70% are in the pension age group, forty years of age and over, we have as of May 31st, 1940, 5,611 on pension for the blind. For this group we provide a variety of ameliorative services and assist them wherever possible through employment or home industry in earning a permissible supplement to their pension.

We are maintaining our industrial departments since they appear to serve to best advantage a certain group. However, we do feel that placement in individual businesses or in general industry if properly made and supervised, has advantages in general for those who can be so placed. It avoids concentration and segregation. It provides opportunities nearer to, and very often in, home districts. It maintains a more normal and independent outlook.

Speaking generally the schools cannot say that their job is being adequately done until every child capable of taking an education has been as well equipped, academically and vocationally, as possible and given a start or put in touch with a responsible organization from whom services, necessary continuing guidance and aftercare can be reasonably expected. Organizations serving the adult blind cannot reasonably feel that they have met their obligations until they have developed a sufficient variety of employment services or fields to afford opportunities to the employable and semi-employable most suited to their diverse abilities making possible a most normal existence. In my opinion, the most hopeful trend of all is the steadily growing tendency for closer co-operation between educators of, and workers for, the blind. Coupled with this is, I believe, a rapidly growing recognition of the necessity for sweeping out the inefficient, the racketeers, unjustifiable duplications and so putting our house in order that there can be no justification for any misunderstanding or lack of recognition by those responsible for the administration of services in the general educational and welfare fields. To-day more than ever before we as educators and workers are challenged. In a few short years history will record the result of our response and our success.

SIXTH SESSION

THURSDAY MORNING, JUNE 27—9:00 TO 12:00 O'CLOCK

REPORT OF THE CREDENTIALS COMMITTEE

(LIST OF THE DELEGATES PRESENT)

ROBERT LAMBERT, Chairman
Superintendent Indiana School for the Blind

Superintendents:

J. S. Ganey, Alabama School for the Blind, Talladega, Ala.
F. E. Davis, Arkansas School for the Blind, Little Rock, Ark.
A. L. Brown, Colorado School for the Blind, Colorado Springs, Col.
C. J. Settles, Florida School for the Blind, St. Augustine, Fla.
J. W. Williams, Georgia Academy for the Blind, Macon, Ga.
R. W. Woolston, Illinois School for the Blind, Jacksonville, Ill.
Robert Lambert, Indiana School for the Blind, Indianapolis, Ind.
Leslie Hays, Iowa School for the Blind, Vinton, Iowa.
Olive I. Thompson, Kansas School for the Blind, Kansas City, Kansas.
Y. L. Fontenot, Louisiana State School for the Blind, Baton Rouge, La.
J. F. Bledsoe, Maryland School for the Blind, Overlea, Md.
J. G. Cauffman, Michigan School for the Blind, Lansing, Michigan.
J. C. Lysen, Minnesota School for the Blind, Fairbault, Minn.
B. J. Marshall, Mississippi School for the Blind, Jackson, Miss.
E. G. Peterson, Montana School for the Blind, Great Falls, Montana.
M. E. Frampton, New York Institute for the Education of the Blind, N. Y.
E. L. Palmer, New York State School for the Blind, Batavia, N. Y.
G. E. Lineberry, North Carolina School for the Blind, Raleigh, N. C.
W. G. Scarberry, Ohio State School for the Blind, Columbus, Ohio.
Mrs. Jessie R. Greaves, Royer-Greaves School for the Blind, King of Prussia, Pa.
A. G. Cowgill, Penna. Institute for Instruction of the Blind, Overbrook, Pa.
B. S. Joice, Wester Pa. School for the Blind, Pittsburgh, Pa.
G. G. Farrell, Perkins Institution for the Blind, Watertown, Mass.
Vincent Linn, South Dakota School for the Blind, Gary, S. D.
W. E. Allen, Texas School for the Blind, Austin, Texas.
F. M. Driggs, Utah School for the Blind, Ogden, Utah.
J. E. Healy, Va. School for the Blind, Staunton, Va.
Mrs. Jeanne E. Chapman, Washington School for the Blind, Vancouver, Wash.
F. W. Longanecker, Wisconsin School for the Blind, Janesville, Wis.

Supervisors:

Alfred Allen, Ass't. Superintendent, Hadley School for the Blind, Winnetka, Ill.
George F. Meyer, Superintendent, New Jersey Day Classes for Blind.
L. L. Watts, Superintendent, Day Classes, Virginia.

Board Members:

Mrs. Eleanor Moyniham, N. Y. State School for the Blind, Batavia, N. Y.
Mr. Frank V. Powell, Wis. School for the Blind, Janesville, Wis.

Libraries for the Blind:

Mrs. Alma Randall, Carnegie Library of Pittsburgh, Pittsburgh, Pa.

Teachers:

Alabama School for the Blind, Talladega, Ala.
A. Abrams
Mrs. W. J. Burns
Mrs. W. C. Dowdell
Mrs. R. H. Woodward

Arizona School for the Blind, Tucson, Ariz.
Dr. Louise Wilber
Miss Elinor Wood

Colorado School for the Blind, Colorado Springs, Colo.
Florence Blake
Charles Kaufman

Florida School for the Blind, St. Augustine, Fla.
Ruth Abee

Georgia Academy for the Blind, Macon, Ga.
Mrs. Hamp Riley

Illinois School for the Blind, Jacksonville, Ill.
H. G. Stephenson
Armeada Woods

Indiana School for the Blind, Indianapolis, Ind.
Mabel Leive
B. F. Smith

Iowa School for the Blind, Vinton, Iowa
Georgia Lee Abel
Louise Anderson
Mary L. Reeder

Louisiana School for the Blind, Baton Rouge, La.
Rilla Beck
Paola Meaux
Ila Parent
Nannie E. Poston

Maryland School for the Blind, Overlea, Md.
Lois V. Cox
Paul Langan
Lucy Tibbetts

Massachusetts Institution for the Education of the Blind, Watertown, Mass.
Francis M. Andrews
Eleanor W. Thayer
Edward J. Waterhouse

Michigan School for the Blind, Lansing, Michigan
Jean De Boer
Olene Peterson
Frank Roznowski

Missouri School for the Blind, St. Louis, Mo.
Lester Best
J. H. Botts
Mrs. Carpenter
Mrs. Fred Reinbeck

New Mexico School for the Blind, Alamorgordo, N. Mex.
Violet Bushan
Oscar E. L. Newman
Mildred Scharpp

New York Institute for the Education of the Blind, N. Y.
Dr. Athearn
Mr. Mitchell
Mrs. Robinson

New York State School for Blind, Batavia, N. Y.
Edward H. Brayer
Michael Goldberg
Grace Towsley

North Carolina School for the Blind, Raleigh, N. C.
Ronald B. Biddle

Ohio School for the Blind, Columbus, Ohio
Helen Kramer
W. R. Niday
Elizabeth Stoltz
L. J. Petzinger

Oklahoma School for the Blind, Muskogee, Okla.
J. R. Corr
Georgia Caldwell
Grace Davenport

Pennsylvania Institution for the Instruction of the Blind, Overbrook, Pa.
Mrs. E. K. Arthur
Mrs. C. K. Duddy
Marion Kohn
Dr. N. F. Quimby

South Carolina School for the Blind, Cedar Springs, S. C.
Louisa Walker
Lola Walling

Tennessee School for the Blind, Nashville, Tenn.
Leah Klott
Annie Ruth Parr
W. W. Spellings

Virginia School for the Blind, Staunton, Va.
Ruby Hamrick
Dorothy Post
Rexford Reid
M. G. Coville

Washington School for the Blind, Vancouver, Wash.
Sara E. Jenks
Bradford J. Reed

Western Pa. School for the Blind, Pittsburgh, Pa.
L. Elizabeth Oberly
Joseph C. Parker
Mary I. Walrond

West Virginia School for Deaf and Blind, Romney, W. Va.
R. W. Golladay

Wisconsin School for the Blind, Janesville, Wis.
H. Alton Davis
R. E. Long

Royer-Greaves School for the Blind, King of Prussia, Pa.
Florence Ash

Territorial School for the Blind, Honolulu, T. H.
Isabel Kim

Summary:

Superintendent Delegates	29
Supervisor Delegates	1
Board Member Delegates	2
Director Delegates	
Library Delegates	
Teacher Delegates	
Total Number of Delegates	
Honorary Members	
Grand Total	
39 States Represented	
Hawaii	
India	
Canada	
South Africa	
Egypt	

"PROGRESS REPORT OF THE JOINT FINDINGS COMMITTEE REPRESENTING THE AMERICAN ASSOCIATION OF INSTRUCTORS OF THE BLIND AND THE AMERICAN ASSOCIATION OF WORKERS FOR THE BLIND"

J. C. LYSEN
Chairman of the Committee—Superintendent, Minnesota School for the Blind
Faribault, Minn.

Those of us who attended the convention of the American Association of Workers for the Blind at Los Angeles last July little dreamed that our convening in Pittsburgh this week could be so prophetic.

Eleven months ago, we talked about "Democracy at work". Today, our national defense vocabulary has taken on such Martian words as "blitzkrieg", "panzer", and "stukas". Last summer, we gathered serenely in Los Angeles, the "City of Angels"; now we are in Pittsburgh, where deep-throated and fiery blast furnaces symbolize steel—the only argument apparently that can possibly win in a world gone suddenly mad.

Whether or not war comes to the Western Hemisphere, we, who are engaged in work for the blind, will need to think clearly and quickly lest our ideals and past efforts be swallowed up in the readjustments, which inevitably follow cataclysmic war in any part of the world.

In its first report to this group, two years ago, the Joint Findings Committee stated that the basic reason for the formation of the Committee was a widespread feeling that the whole program for the blind could be strengthened through more effective cooperation between the A.A.I.B. and the A.A.W.B. It added: "Confusion, lack of coordination, ineffective coopera-

tion, duplication of efforts, lack of national leadership, inadequate general and specific objectives for our work, educational, economic. and social, these are some of the current ills of our profession".

In the days which lie ahead, we will need to redouble our efforts lest confusion lead to chaos, lest lack of coordination be followed by paralysis, lest ineffective cooperation result in disintegration, in short, lest rehabilitation, lest prevention of blindness programs, lest placement efforts, lest everything be drowned in the maelstrom of gigantic, federally dominated pension system for the blind.

It was the consensus of opinion of those present at the Joint Findings Committee meeting at Louisville, Kentucky, March 16, 1939, that the action taken by this conference at Lansing two years ago, and by the Executive Committee of the A.A.-W.B. in October, 1938, had put these two associations definitely on record as favoring some form of cooperation. Having been relieved of further work in this direction, the Joint Findings Committee devoted itself to the research program outlined in the Preliminary Report (1938).

In its progress report to the A.A.W.B. convention a year ago, the Committee listed the following assignment of topics:

Research designed to indicate proper fields of money-raising activities for national and local organizations—AMERICAN FOUNDATION FOR THE BLIND, NEW YORK, N. Y.

A survey of the charters, statutes, constitutions and by-laws of all agencies engaged primarily in work for the blind, and a compilation and analysis of the reports of these agencies during the last five or ten years—COLUMBIA, UNIVERSITY, NEW YORK, N. Y.

The construction of a uniform basic curriculum in schools for the blind—CALIFORNIA SCHOOL FOR THE BLIND, BERKELEY, CALIF.

The development of vocational aptitude tests and measures—THE UNIVERSITY OF TEXAS, AUSTIN, TEXAS.

The organization of a definite research program, which will investigate and evaluate the possibilities of day classes for blind students—UNIVERSITY OF OHIO, COLUMBUS, OHIO

Research designed to develop a pre-school educational program for the blind—RESEARCH COUNCIL FOR BLIND CHILDREN, NEW YORK, N. Y.

Research designed to show fields of private and public assistance to the blind and to set standards to evaluate such fields—THE AMERICAN FOUNDATION FOR THE BLIND, NEW YORK, N. Y.

An index of original and serious graduate studies relating to the blind—THE AMERICAN PRINTING HOUSE FOR BLIND, LOUISVILLE, KENTUCKY.

The following is a quick statement of the status of some of the assigned studies:

The University of Texas in cooperation with the Texas School for the Blind has indicated its interest in the topic, "Reading Habits of the Blind", rather than the assigned subject, namely, "The Development of Vocational Aptitude Tests and Measures". The first draft will be ready in all probability toward the end of the present year.

It was not possible for the Research Council for Blind Children, New York City, to follow through its assignment on "Research designed to develop a pre-school educational program for the blind".

Mrs. Margaret Riddell, who has been preparing "an index of original and serious graduate studies relating to the blind" reports that she has about completed her library research and will soon direct requests for information to graduate schools of our colleges and universities.

A progress report from the University of Ohio states that under the direction of Dr. Charles Scott Berry, professor of special education in that University, considerable work has already been done on the two topics assigned, namely,

Day classes for blind students, and

The relationship between public school classes for the blind and residential schools.

State agencies in Ohio have been asked by Dr. Berry to cooperate in securing data. The study will concern itself first with Ohio, then other states. Preliminary drafts will be placed in our committee's hands by the early part of next year.

The topic "Uniform Curriculum for Schools for the Blind", has already been covered by means of a preliminary study, prepared by Dr. R. S. French, Superintendent of the California School for the Blind.

Other groups represented in research studies have informed the committee that they are making satisfactory progress. Columbia University, for example, has already received a tremendous amount of material to be used in its survey of charters, statutes, constitutions, and by-laws of all agencies engaged primarily in work for the blind.

After the Los Angeles convention our committee assigned to the American Foundation for the Blind, "A study of salaries of teachers and workers for the blind and present retirement plans with careful comparison with teachers of non-handicapped children". A preliminary report on this study has been submitted by Dr. Berthold Lowenfeld. It states in part: "It is expected that the survey will be completed early in the coming year.

"In order to secure the necessary data for a study, letters and questionnaires were sent out to schools for the blind in the United States in January 1940 . . . completed superintendent's questionnaires have been received from forty-five schools; and 732 teachers have sent in their questionnaires. This constitutes the participation of 90% of the schools for the blind and 81.4% of the teachers.

"The survey will include tables on the distribution of salaries paid to teachers of various groups (elementary, high school, music teachers, industrial teachers, etc.) in various sections of the country, median salaries, and a comparison of salaries paid in schools for the blind with salaries paid in public school systems in corresponding communities. In addition, information will be made available on professional training, on teaching experience, on requirements for teachers, on teachers load, provisions for retirement, etc."

Following a conference with Mrs. Eleanor Brown Merrill, Executive Director of the National Society for the Prevention of Blindness, the Society accepted the Committee's request to make a survey of prevention of blindness programs in the various states.

In the making of assignments to research agencies, certain principles have been laid down as fundamental. These will be presented to you in the words of the Los Angeles report.

1. The Joint Findings Committee of itself will not do any of the actual research. It is prohibited from doing this, first of all, because it has no desire to set up any new research agency. In the second place, it would have the necessary funds. The Committee will have plenty to do if it can serve simply as a clearing house.

2. The Joint Findings Committee will continue to appoint, as far as possible, existing agencies for the purpose of attacking important research problems. In other words, an agency receiving an assignment must be known to be interested in the project in question, and must be equipped to make a thorough, unbiased factual study.

3. The Joint Findings Committee, when necessary, will invite the counsel of contemporary men and women, who are making outstanding contributions in solving problems relating to the blind.

4. Members of the Joint Findings Committee have taken a long range attitude toward its assignments and will not be surprised if another several years elapse before the job is finished. This does not

mean that the members of the Committee contemplate delay; they realize, however, that any comprehensive program once initiated, cannot be successfully completed overnight. Haste must be made slowly because half-baked studies are worse than no studies.

5. The Joint Findings Committee hopes to make completed studies available by having them printed. The costs of such projects can possibly be borne by interested and endowed groups.

The members of this committee have held two sessions during this convention, during which time future proceedure was discussed and agreed on.

1. Research studies, before being accepted by the committee, must meet recognized standards of research.

2. The committee reserves the right to edit and prepare acceptable prefaces, and to submit them to individuals or organizations qualified to analyze and criticize their technical portions.

3. The committee wishes to avoid repititious studies and will cull out those which have no special merit.

4. Whenever the committee finds that a particular study may have some bearing on policies of either the A.A.I.B. or the A.A.W.B. or on both, preliminary drafts will be submitted to the respective executive committees.

5. Studies, warranting distribution, will be printed in monographs that are uniform in size. This will permit early publication and eventual binding of several monographs in one or more volumes.

In conclusion the committee wishes to assure the members of this convention that it does not feel that it will have discharged its obligations by merely arousing interest in certain subjects. If research is to be beneficial it must prove challenging and applicable.

The committee recommends that its present name be changed so as to read "The Joint Advisory Committee on Research."

The foregoing report is concurred in by the members of the committee. All of them, by the way, are in attendance at this convention. The report has been discussed with Mr. J. S. Ganey, president of the A.A.I.B. and with Col. E. A. Baker, president of the A.A.W.B.

Members of the Committee are:

A.A.I.B. Representatives

W. E. Allen, Superintendent
Texas School for the Blind
Austin, Texas

John F. Bledsoe, Superintendent
Maryland School for the Blind
Overlea, Maryland

Joseph F. Clunk, Field Agent
Bureau of Services for the Blind
Office of Education
Department of Interior
Washington, D. C.

A. L. Brown, Superintendent
Colorado School for Blind and Deaf
Colorado Springs, Colorado

R. W. Woolston, Superintendent
Illinois School for the Blind
Jacksonville, Illinois

A.A.W.B. Representatives

Colonel E. A. Baker, Managing Dir.
Canadian National Institute for the Blind
Toronto, Ontario, Canada

Dr. Roma S. Check, Ex. Sec.
North Carolina Commission for the Blind
Raleigh, North Carolina

H. R. Latimer, Executive Secretary
Pennsylvania Association for the Blind
Pittsburgh, Pennsylvania

J. C. Lysen, Chairman of Committee,
Superintendent , Minnesota School for the Blind
Faribault, Minnesota

"REPORT OF THE CERTIFICATION COMMITTEE"

SUPERINTENDENT G. E. LINEBERRY, Chairman
Raleigh, North Carolina

At the last meeting of the American Association of Instructors for the Blind the Association requested the President to appoint a committee to be known as the Permanent Committee on Certification. The duties of said Committee would be to put in operation the plans approved at that time by the Convention for issuing teachers' certificates. We, the Committee appointed by the President, desire to make report for the biennum.

The Committee was called to meet in Louisville March 17, 1939 as the Executive Committee was also meeting at that time so that we might have the benefit of the advice of the Executive Committee. For special reasons a majority of the Committee did not get to this meeting but the Chairman consulted with the Executive Committee and the Executive Committee advised that the matter of handling certificates should be delegated to the Secretary of the Association.

The desirability of asking the American Foundation to render the service of certification was discussed. The report of the Certification Committee presented at the Lansing Convention stated "That because of the desirability of a permanent location of records and files, the Certification Committee consider negotiating with the American Foundation for the Blind as to the possibility of the Foundation rendering the service of a non-voting secretariat." The Executive Committee felt that the certification of its teachers was a vital function of the parent association and ought not to be delegated, although the Committee took cognizance of the kindly offer of the American Foundation for the Blind and was grateful for the interest shown by the Foundation staff.

The Chairman of the Committee took this matter up with the other members of the Committee and they approved of the plan suggested by the Executive Committee.

We found that plans for issuing certificates to teachers of the deaf had been nicely worked out so we wrote to Dr. Irving S. Fusfeld, Kendall Green, Washington, D. C., and secured copy of the form of certificate issued for the deaf, also copy of application blank. We found that the form of certificate could be adapted to our use by having blanks left for the name and for the type of certificate, same to be filled in when issued for each teacher. The form of application was revised and the requirements for certificates rendered by S. M. Whinery and adopted by the convention were substituted for requirements put in for the deaf. This and some minor changes made this form of application suitable for our use and we had 2,000 copies of this blank printed and 1,500 copies of the certificates printed, cost of same being $26.31.

We found in the blank for the deaf under Class A one feature not included in the requirements set up by the American Association of Instructors for the Blind. This recognized experience and read as follows:

"In lieu of the above requirements, this Certificate may be granted when, in the judgment of the Certification Committee, applicants have qualified through distinguished professional services.

"The following will receive consideration by the Committee in rendering their decision:

"Executive position
Supervising teacher
Normal School instructor
Demonstration work at conventions or summer schools

Papers delivered at professional meetings

Articles written for professional journals
Offices held in professional organizations
Special research activity

And

"At least 15 years successful teaching, all of which must have been completed prior to 1940,"

Or

"20 years successful teaching experience prior to 1940."

The Committee felt that it might be that this convention would want to recognize experience in the profession and might wish to add this section so we had it inserted in our application blank but instructed the Secretary not to issue any certificates under that section until it should be approved by the convention. If this convention sees fit to adopt that feature, then the Secretary would be free to issue certificates on that basis; otherwise, he should just mark out this on the blank and not consider any certificates on the basis stated above. The Committee in no way desires to influence this convention in its free action on this matter but felt that it would save the necessity of having new blanks printed and in case this requirement is not acceptable to the convention, the Secretary could easily so mark the application blanks without incurring any further expense.

The Committee thought that the President and Secretary of the convention should be the officials to sign all certificates issued. We felt that this would make the vital connection desired with the convention and which the Executive Committee recommended and would prevent any danger of confusion in the future.

Certificates and application blanks were forwarded to the Secretary of the A.A.I.B. on April 29, 1940. The Secretary had been previously notified that they would be sent so that he might have a list of teachers in all schools and we suggested that there be mailed to each school enough copies so that each teacher might have an application blank so those who desired could fill these out and send them in promptly.

A charge of $1.00 for each certificate was adopted by the A.A.I.B. two years ago and we recommend that the Treasurer of the A.A.I.B. be requested to keep this as a separate fund to be used for the expenses of this work, said expenditures to be approved by the Executive Committee.

Respectfully submitted,

G. E. Lineberry, Chairman

E. L. Palmer
A. G. Cowgill
Committee

"ANNUAL UNIFORM STATISTICAL REPORT FOR RESIDENTIAL SCHOOLS FOR THE BLIND"

MRS. M. GENEVIEVE COVILLE, Chairman
Principal Virginia School for the Blind

In 1936, Mr. G. E. Lineberry appointed the following committee to formulate a report blank for tabulating statistics of schools for the blind in a uniform manner:

Josef G. Cauffman, ch.
Elizabeth Brooks
M. Genevieve Coville
B. S. Joice

No report was presented at the Convention of 1938 since the data was not complete. Consequently, the committee has functioned over the four-year period.

The purposes of this form are:

1. To centralize general information concerning residential schools for the blind

2. To furnish uniform data that might be used in assembling information pertinent to the education of the blind

3. To supply to individual superintend-

ents such comparative data as might be of use in budgeting or in promoting legislative measures

4. To serve as a source of information in surveys made by authorized agencies or by persons interested in work for the blind.

The committee recommends that this report be used in the following manner:

1. In order that the information may be kept within the organization of the A.A.I.B., that the vice-president be authorized to receive and to act as a clearing house for this information

2. That a report be sent by each superintendent annually.

3. That such instructions be formulated by the vice-president as will tend to clarify and to make uniform such data as per capita costs and similar items

4. That a combined report be assembled by the vice-president and filed with the secretary of the A.A.I.B.

It is further recommended by the committee that superintendents scan this form and submit to the vice-president such suggestions or revisions as may be deemed advisable.

Respectfully submitted,
M. Genevieve Coville
Acting Chairman
Uniform Report Committee

PUPIL DATA

1. (a) Number of pupils enrolled: (list each pupil once)

1. Kindergarten .....
2. Elementary .....
3. Junior high (7, 8, 9 grades) .....
4. Senior high (10, 11, 12 grades) .....
5. Senior high (8-4 plan) .....

Total number of pupils .....

(b) Number of pupils in special training classes .....

1. Manual training and shop work .....
2. Household arts and sciences .....
3. Music students .....
4. Other .....

Total students in special classes .....
Total enrollment of school .....

2. Number of pupils enrolled at close of school year .....

Classified as to vision:
Less than 20-200 after refraction .....
Between 20-200 and 20-70 .....
Better than 20-70 .....

3. Racial status of pupils:

White .....
Negro .....
Other .....

4. Number of pupils at the close of the school year for 19.....

who are both Blind and Deaf.....

5. Data on graduates or pupils completing grades 8, 9, and 12. Systems with

midyear terms should count promotions and graduates of both semesters. Count each person but once.

(a) Eight grade (8-4 system).....Boys——— Girls——— Total———
(b) Ninth grade (Junior high only).....Boys——— Girls——— Total———
(c) Twelfth grade-Senior high.....Boys——— Girls——— Total———
Six year high.....Boys——— Girls——— Total———
Four year high.....Boys——— Girls——— Total———
Totals .....

ANNUAL UNIFORM STATISTICAL REPORT OF THE SCHOOLS FOR THE BLIND

OF ....., ... Superintendent
(City, County, or State School)
For the Year Ending June....., 19.....

FINANCIAL DATA

1. Sources from which the school receives its financial support: .....

(a) Private sources (tuitions, endowments, etc.)..... (b) Tuitions paid by the State..... (c) State appropriations..... (d) County appropriations..... (e) Federal aid.....
(f) Other sources.....

2. Receipts for the fiscal year ending....., ...

(a) Federal Government..... (b) State Government.....
(c) County..... (d) Municipal .....
Total public funds.....
Other sources.....
Total Funds Available.....

3. Expenditures for the fiscal year ending....., ...

For capital outlay (grounds, buildings, equipment, etc.):
(a) For instructional purposes only.....
(b) For other purposes.....
Total capital outlay.....

For current expenses:
For instructional services only:
(a) Salaries of supervising principals.....
(b) Salaries of classroom teachers.....
(c) Salaries of other teachers.....
(d) Supplies for instructional uses.....
(e) Other current instructional costs .....
Total for instructional purposes .....

For general operating expenses:
(a) Fuel costs.....
(b) Food costs.....
(c) Household maintenance costs.....
(d) Plant maintenance costs.....
(e) Other operating costs.....
Total for general operating costs.....
Other major expense items not classified:

.....

Total current expenses.....

4. Per capita costs for fiscal year ending.....

(a) Instructors salaries.....
(b) Other salaries.....
(c) Food costs.....
(d) Maintenance other than food.....
Total per capita costs.....

ADMINISTRATIVE DATA

1. Authority by which the school is directed in its policies:

_____(a) Private agency
_____(b) County authority
_____(c) State department of Education or public instruction
_____(d) Other state board.....
_____(e) Other authority.....

2. Buildings and Equipment:

_____(a) Number of buildings on the campus
_____(b) Number of dormitories
_____(c) Number of Buildings for special training
_____(d) Is hospital a separate building
_____(e) Is school held in a separate building
_____(f) Number combined classroom and dormitory
_____(g) Number combined dormitory and other uses

3. The Superintendent:

(a) Salary (cash).....
(b) Cash value of increments.....
(c) Total value of salary.....

4. Extension services:

Is summer school conducted regularly on your campus?.....
If not, when was the last course given?.....
Are credits given in summer courses acceptable on college work?.....
Number of teachers enrolled in.....(yr.).....
Length of course.....(wks.)
Nature of special work given.....

PERSONNEL DATA

1. Staff:

(a) Number of administrative officers.....
(b) Number of classroom teachers.....
(c) Number of special teachers.....
(d) Number of Housemothers.....
(e) Maintenance helpers (janitors, etc.).....
(f) Kitchen, dining rooms, etc.....
(g) Power plant.....
(h) Other professional staff:
Psychologists .....

Social workers .....

Graduate nurses .....

Doctors .....

Occulist .....

Dentist .....

(i) Farm employees.....

(j) Other employees.....

Total staff of the school.....

2. Blind Teachers and employees:

(a) Number of totally blind teachers.....

(b) Number between totally blind and ability to read regular type after refraction.....

(c) Number of totally blind employees.....

(d) Number of employees with sight as (b) above.....

Total number handicapped employees.....

3. Teachers salary schedule:

	1st year	2nd year	3rd year	4th year	5 or over	
Kindergarten						
Elementary						
Junior High						
Senior High						
Household arts						
Manual training						
Supervisors						
Principals						

4. Qualifications of teachers:

(Give number teachers in each department who have the number of years training, listed in columns of normal, college, or university training above four-year high school. Count 31 hours of training as one year. Indicate by means of parentheses around separate set of figures, training of blind teachers.)

Kind of teacher	1-1.9 yr.	2-2.9 yr.	3-3.9 yr.	4-4.9 yr.	5 or more	
Kindergarten						
Elementary						
Junior high						
Senior high						
Special class						
Others						
Totals						

6. Age grade table: School:..... Year:.....

Secondary (8-4); Elementary (8-4); Senior, Junior, Elementary (6-3-3)

Grades	6	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	20	Total	Near Normal	Under Normal	Normal
Kgn.																					
1																					
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					
Age Total																					

Remarks:

"REPORT OF THE BRAILLE COMMITTEE"

FRANCIS M. ANDREWS

Principal, Perkins, Watertown, Pennsylvania

At the A.A.I.B. Convention held in June, 1938, at Lansing, Michigan, it was voted that a committee representing this body be appointed by the President to recommend to the Printing House, types of books, grades of braille, and other technical matters which would make books satisfactory to the schools. This committee was further instructed to bring in a report at the next biennial convention.

The committee held a meeting in New York at which time the policy to be followed was discussed. It was decided at that time to confine our report to the types of braille and books in use at the present time. It was also believed that, to obtain the desired information, a questionnaire should be sent to the schools. The questionnaire is the work of the entire committee and does not represent the ideas of one individual.

Seventy-four questionnaires were mailed to schools for the blind and braille classes in public schools. The committee is exceedingly grateful to the sixty who replied, especially to those who gave detailed answers. Some schools had several teachers reply; this explains why the tabulations on some of the questions exceed the number of questionnaires sent.

The questionnaire and the results are as follows:

1. Do you teach grade one braille in your school?

Each school replied that it did. As to when grade one braille is taught, the replies varied. Five teach it in pre-primary and First Grade; twenty-one in the First Grade only; twenty-one in both First and Second Grades; four only to those who come from sighted schools and have learned the mechanics of reading; and four teach it only to the retarded group.

As to the question—Why do you believe it better to begin pupils in grade one braille when they must, within two or three years, learn grade one and one-half? —the variety of answers is indeed interesting. Eighteen replied that it was taught because it was simpler and that it seemed much more logical to start in this way, leading up to the more complicated grade one and one-half, then on to grade two. There seemed to be no reason why contractions should be started for blind children, when seeing children had no such contracted reading. Sixteen claimed it made better spellers; and, then, there were those who felt that it was a great help with the teaching of phonetics; while others felt that it entirely depended upon the age of the child and the child's mentality whether he should be started in grade one or grade one and one-half. Several made the very interesting statement that grade one was taught because there was a lack of textbooks in grade one and one-half and would prefer to teach grade one and one-half, if they could have plenty of books.

2. When is grade one and one-half braille introduced in your school?

One school begins as soon as the child is ready to read; two will start this work as soon as the pupil has mastered grade one; six begin at the latter part of the first year; while twenty-three begin the work sometime in the Second Grade; and sixteen put it off until the Third Grade.

Do you have trouble introducing grade one and one-half when opposite contractions, such as "you" and "and" are presented in the same lesson?

Several reported that it depended upon the individual child; six believed that this is the proper way to teach contractions, as it makes them stand out more clearly in the pupil's mind; eight avoided any such combinations; four had some slight difficulty; seven considerable difficulty; and twenty-three found no trouble at all.

3. Do you prefer books for beginners embossed only on one side or both sides and please state why.

Thirty-six voted for one side; sixteen for both sides; and six had no preference. The reasons given for one-sided braille were: In books thus embossed the braille seemed to be better, stood out more clearly was easier for the children to read, as the children did not get confused by feeling the indentations of the dots from the other side, easier for the child to hold his book and keep his place.

Reasons advanced for both-sided braille were: It saved space, made it very difficult for a partially-seeing child to read with his eyes, children liked books embossed this way better, especially where there were fewer volumes to the book.

Two suggestions were made that the Printing House should be careful to complete a sentence on a page before going to the next page in the early books and that there should be little on a page, thereby making the volumes small in order to give the child a psychological feeling of accomplishment. If the Printing House should follow this suggestion in embossing the different standardized tests, it would be of tremendous assistance to the pupils.

4. There may be some confusion as to the terms "interlined" and "interpoint". Interpoint here means that the braille dots on one side of the paper come between the braille dots on the opposite side; while interlined means that the braille dots on one side of the paper are further apart, allowing the braille lines on the opposite side to come between the lines on the opposite page. A good example of this is found in THE ELSON BASIC READER PRIMER and, also, in NEW FRIENDS of the SILENT READER SERIES.

Do you approve of having the braille books for the First Grade interlined?

Forty approved; fifteen disapproved; and one did not care.

When shall we introduce interpoint?

The spread that this question received is indeed interesting, as four would put it in the First Grade; two as soon as the child can read normal spacing; four as soon as introduction of grade one and one-half has started; nine in the Second Grade; thirteen in the Third; eight in the Fourth; three in the Intermediate Grade; five in the Fifth; one in the Sixth; one in the Eighth; one in High school; and one never.

5. What effect or influence do you think contractions have on the spelling of blind students?

Forty-two believed it had no effect, thirty that it is seriously detrimental to spelling. When asked if they could substantiate their statements with any studies made, ten reported that they backed their statements through personal experience; thirty-five knew of no studies made; six believed it is a great hindrance in typewriting; three said that grade two made for even worse spellers than grade one and one-half; eight believed that if phonetics were properly taught to begin with and proper syllabication, they would have no effect and the contractions would be an aid to spelling. It was also believed that the words which had a sign given for the entire word, such as "people", "knowledge", etc., should be drilled thoroughly, in order that the pupil learn to spell such words.

6. Would you approve of the Printing House embossing books in both grades one and one and one-half for the first two or three years of school work? We understand that this would not add much to the cost of the books.

Forty-six approved and twenty-four disapproved.

7. Would you approve of the Printing House purchasing forty to fifty ink print copies of all textbooks brailled so that we may buy our print copies from Louisville, thereby assuring ourselves of the same editions for both print and braille? Of course cash would have to be paid for these ink print books.

Sixty-eight approved; three disapproved.

8. When do you introduce grade two braille into your school and how is it taught to the pupils?

One teaches it in the Third Grade; three in the Fifth; twelve in the Sixth; fourteen in the Seventh; seven in the Eighth; two in the Ninth; three in High School; three report that it depends upon the child's readiness for it.

As to how it is taught: Six introduce it gradually in spelling and writing lessons, taking the easiest combinations first; four use a text prepared by Miss Madeleine S. Loomis; sixteen have special classes for it; five have no classes, leaving it entirely up to the individual; and four use the STANDARD BRAILLE SERIES, Book III.

9. Is it justifiable to have educational books for the schools embossed according to one interpretation of the grade two rules (full syllabication), and library and adult books embossed according to a different set of interpretations (Library of Congress ruling, employing the principle of sequence)?

Seventeen said there should be two types used; thirty-nine said no.

Miss Madeleine S. Loomis, who is the author of YOU CAN LEARN TO READ BRAILLE, has some very pertinent remarks to make concerning this question. She has so clearly defined the question that I feel her reply deserves a place in this report. Quoting from her letter, Miss Loomis calls our attention to the following facts:

"Rule 34, which refers to contractions overlapping syllable division, was ambiguous but, at no time, could it ever legitimately be interpreted as meaning full syllabication. Because Rule 34 was not as specific as necessary for uniform embossing, a commission was appointed to give an official interpretation. I wish to point out that people using full syllabication cannot possibly claim it as a legitimate interpretation and that the Library of Congress is following the decision made by a committee appointed for that purpose. No one can truthfully interpret Rule 34 as full syllabication for the following reason: The rule states: Contractions forming parts of words should not be used when they are likely to lead to obscurity in recognition or pronunciation, and, therefore, they should not overlap well-defined syllable division. Word signs should be used sparingly in the middle of words, unless they form distinct syllables. Special care should be taken to avoid undue contraction of words of relatively infrequent occurrence. (See Appendix B.) This appendix shows examples, illustrating the preferred usage of contractions. In the examples shown is the word 'towards', which is divided 'to'wards' in Webster's Dictionary, the authority used for syllable contraction 'ow' in the list and 'underived' is written with the contraction 'er'. The supplement to Rule 34 gives several other examples of contractions being used to overlap syllable division, such as 'one' being contracted in 'money' and 'honest'."

Miss Loomis further states that: "It was voted that the special uniform type committee be superceded by the committee of five workers, two to be appointed by the American Association of Workers for the Blind, two to be appointed by the American Association of Instructors of the Blind, and one by the American Foundation for the Blind, with authority to act in behalf of these agencies in the maintenance of a standard braille code, provided that the key to Standard English Braille may not be altered or revised without the specific approval of the American Association of Instructors of the Blind. This committee, when appointed, became known as the American Braille Commission. After their second meeting the members of the Commission issued the following: 'It was found that the simple rule, observed in printing grade one and one-half, that no contraction should overlap a syllable division, could not be practically applied to grade two for various reasons, one of which was the fact that many con-

tractions peculiar to grade two, such as 'ally', 'action', and 'ity', contained more than one syllable.' The contractions 'ever', 'under' and 'many' also contain more than one syllable and the supplement to Rule 34 shows that the contraction 'ever' should be used in 'clever' and 'several', and the contraction 'under' in 'thunder'. In making their decisions the Commission made one or two decisions which conflicted with the already existing rules. They also reversed some of the earlier decisions, which caused much confusion. The interpretation used by the Library of Congress is, therefore, not its own particular interpretation, but represents the decision of the Commission, which was appointed for that purpose."

9. Is the Printing House justified in embossing several texts on the same subject, thereby giving the schools a wider choice of braille material?

Seventeen said it would be a tremendous help, especially in classes that are carried on in units. Thirty-nine replied no.

10. Do you have any comments or complaints to make in the new soft, round back binding now being used in the braille textbooks, as compared with the old, stiff, back binding?

Twenty-one claimed it was satisfactory; fourteen said it was much easier to handle; one replied it was good to have a change of color; thirty-five replied it was not satisfactory because the pages are easily loosened, the binding comes off and is not strong enough to hold the pages in place. A number replied that the size was particularly good for younger children.

Other suggestions made, which would be helpful to the Printing House, were: The Printing House should publish clear type books; all books embossed should have the name of the book and the number of the volume written on the side in braille, the same as is done for the library books; others felt that pre-primers and primers should have an even margin on the left side so that the beginners would find the following line more easily.

"In the light of the replies received to the questionnaire, your committee wishes to recommend for the consideration of the Trustees of the American Printing House for the Blind:

"1. The adoption of the following practices of the publication of braille materials for the use of the schools:

"a. In pre-primers and primers the use of braille, grade one and one and one-half, according to the demand from the schools; one side, double space printing. (Note: It is recommended further that the practise of following the sentence-phrasing form in the ink print editions of primary books be discontinued, so that all braille lines begin in the first cell. Care should also be taken to complete a sentence on a page before going to the next page, so that the pages not be too full.)

"b. In first readers and other First Grade material the use of braille, grade one or one and one-half, according to the demand for the school; interlined printing (i. e. Two-side double space printing.) Note: Same as "a" above.

"c. In second readers and other Second Grade material, the use of braille, grade one and one-half; one side, single space printing.

"d. In Third Grade to Junior High School material, the use of braille, grade one and one-half, interpoint printing.

"e. In Junior—Senior High School material, the use of braille, grade two, following the interpretation of the rules for Standard English Braille, as at present set forth by the Library of Congress, interpoint printing.

"f. In educational and achievement tests the use of the proper grade of braille and type of print in accordance with "a"—"e" above, with the further provision that care should also be taken to complete not only sentences, but whole questions on a page before beginning the next page.

"2. The preparation (or adoption) and publication for manuals for teaching braille, grade one and one-half and two, as follows:

"For teaching revised braille grade one and one-half—a manual (published in both braille and ink print) accompanied by appropriate reading drill material embossed in braille grades one and one and one-half, the grade one and one-half contractions gradually introduced in the order followed in the manual.

"For teaching Standard English braille, grade two—a manual (published in both braille and ink print) accompanied by appropriate reading drill material, embossed in braille grade one and one-half and two, the grade two contractions gradually introduced in the order followed in the manual and following the interpretations of the rules of Standard English Braille, as at present set forth by the Library of Congress.

"3. The adoption of the following practises in the printing and binding of braille material for the schools:

"a. Continue the use of the present type of binding of textbooks, with every effort made to improve its durability.

"b. Reduce the average number of pages per volume, especially in books for the use of younger children.

"c. Include a braille identification panel, similar to that used in Library of Congress books, at the top left side of the front cover, giving the author, title, and volume number.

"d. Include a bookmark with each volume.

"4. The adoption of the practise of stocking ink print copies of American Printing House brailled textbooks, to be purchased by the schools for cash, so that identical braille and ink editions may be available.

Respectfully submitted,

Francis M. Andrews, Chairman

Paul J. Langan

S. M. Whinery

"REPORT OF THE AMERICAN FOUNDATION FOR THE BLIND"

ROBERT B. IRWIN

Executive Director

Field Service—The changing conditions of the past ten years and particularly the increased responsibility for social welfare assumed by the Federal and State governments have prompted a number of well-established agencies for the blind to review their policies and programs to discover what changes are required to bring them into line with present-day conditions. The field staff of the American Foundation for the Blind has been kept extremely busy during the past year assisting in these studies. This is an important activity as it will not only tend to improve the work of the local organizations for the blind, but will also result in a more uniform conception of the program of community services which should be rendered to blind people. Among the communities requesting assistance in the revision or reorganization of their service programs for the blind are: Pittsburgh, Chicago, Cleveland, Minneapolis and Rhode Island. The seriousness with which local private citizens and public officials are assuming responsibility for putting the results of these studies into effect is most gratifying, and augurs well for the blind people of the communities concerned.

Further field activities of the Foundation consist of the organization of the Penobscot Association for the Blind in Bangor, Maine; the expansion of the Tampa Lighthouse for the Blind into the Hillsboro County Association for the Blind in Tampa, Florida; and the expansion of the Dallas Red Cross Lighthouse into the Dallas County Association for the Blind in Dallas, Texas. Advisory or consultation service looking toward the improvement of local work for the blind was provided

in Jacksonville and Miami, Florida; Fort Worth, San Antonio, and Houston, Texas; to the Family Welfare Society in Washington, D. C.; the Social Welfare Society in Lincoln, Nebraska; the Kansas State Department of Social Welfare; the Oregon State Commission for the Blind; the Texas Commission for the Blind; and the Study Commission on the Blind of the Michigan Social Welfare Commission. We take satisfaction in reporting that in Kentucky, where the Foundation's agents have done considerable work during the past few years, the legislature has this year enacted a law providing aid to the needy blind in conformity with the Social Security Act, and also empowering the state department of welfare to develop a program of specialized services for the blind.

National Industries for the Blind

National Industries for the Blind, a division of the American Foundation for the Blind, was organized to cooperate with the Federal government in the administration of the Wagner-O'Day law, directing executive departments of the Federal government to purchase certain of their requirements from workshops for the blind. It is the function of National Industries for the Blind to allocate orders among the workshops for the blind which can handle this business, to aid in extending government business to an ever-increasing number of organizations for the blind, and to help in other ways to find outlets for the products of blind workmen.

Prior to June 1, 1939 brooms and mops were the only commodities purchased by the government under the Wagner-O'Day Act. Since that time nine other products have been added—Cocoa Mats, Pillow Cases, Whisk Brooms, Sanitary Swabs and Deck Swabs, Felt Mattresses, Innerspring Mattresses, Triangular Mops, and Wall and Ceiling Mops. We estimate that orders from the Federal government during the past year have yielded wages to blind people amounting to approximately $100,000.

A new industry has been developed by National Industries for the Blind which gives considerable promise. With the cooperation of the U. S. Rubber Company, a special design of new rubber link mat has been perfected, the manufacture of which is well adapted to blind labor. Twenty-two workshops are now manufacturing link mats. This industry requires little capital to initiate, and the processes are easily learned by blind people. Furthermore, as it is largely an assembly job, the products may be standardized so that all mats are of a uniformly good quality.

Talking Books

The past year has witnessed the Foundation's largest production of Talking Book records for the blind. We have continued to cooperate with the Library of Congress in the production of library Talking Books which are circulated to blind people through the 27 depositories of the Library of Congress. Our research department is constantly working to improve the quality of Talking Book records, and marked progress has been made in this direction recently.

During the past 12 months 81 books and plays in 1,097 records have been produced. We are glad to be able to report that Congress, upon the urgent request of the Foundation, seconded by agencies for the blind and blind people throughout the country, has authorized an increase in the appropriation to the Library of Congress for Talking Books from $175,000 to $250,000 per annum. This will make possible the publication of over 100 new titles annually.

In order that sightless readers may know the new books which are available, the American Foundation for the Blind has continued the publication of a quarterly periodical TALKING BOOK TOPICS, reviewing the new Talking Books as issued. The ink-print edition is sent free to over 20,000 blind readers. An edition published on phonograph records has been sent to blind people on the payment of a subscription price of one dollar per year. This subscription meets approximately the cost of the publication though we are sorry to say that thousands of blind people are

unable to pay this modest subscription charge.

A grant from the Carnegie Corporation has enabled the Foundation to make an intensive study of the Talking Book as an educational medium. 13 schools for the blind enrolling more than one fourth of the blind students of the country and the American Printing House for the Blind are cooperating in this study. The Work Projects Administration and the Library of Congress have also cooperated in this endeavor by making available to the schools for the blind several hundred especially-designed Talking Book machines. (See paper by Dr. Berthold Lowenfeld on "The Talking Book in Education" elsewhere in this volume.)

Summer School for Colored Teachers of the Blind

A new project was inaugurated last summer at West Virginia State College, Institute, West Virginia—the offering of special training to colored teachers of the blind and the deaf. Practically no opportunities for such training had been offered to this group previously. The courses conducted by the Foundation last summer proved so popular that others have been arranged for this summer and an additional teacher has been engaged. Besides teachers already in service, several promising blind young colored students are taking these courses in order to fit themselves for teaching positions.

School Surveys

Cooperation with the schools for the blind in improving their plants and courses of study has become an important service of the Foundation. During the past year intensive surveys were made of the Wisconsin School for the Blind, the Alabama School for the Blind, the Department for the Blind of the Arizona State School for the Deaf and Blind, and the braille classes in the New York City public schools.

Dramatic Instruction in Schools for the Blind

About a year ago the Foundation made a study of the extent to which dramatics is taught in schools for the blind, and found that in many schools there was little or no such instruction. In order to further training of this kind, the President of the Foundation arranged to employ a dramatics teacher to work a month in each of three schools for the blind, to show what could be accomplished and to arouse interest in the subject. The schools selected for this purpose were those of Minnesota, Ohio, and Maryland. The demonstration has produced most satisfactory results. As few schools can afford to hire a special dramatics coach, it became evident that assistance must be extended to teachers of other subjects now on the faculties of schools for the blind to help them to fit themselves to give instruction of dramatic work to blind students. Accordingly, the President of the Foundation has established a six weeks' summer training class for fifteen teachers at Rest Haven, a summer home for blind women conducted by him near Monroe, New York. Both tuition and board have been provided free to these teachers and to the blind people serving as a dramatic cast for instruction purposes. The fact that the enrollment was filled almost immediately after announcement and many applicants had to be turned away, is an indication of the need for such a summer school course.

Special Lending and Reference Library

The services of the Library have met with steadily increasing demand by students in institutions of higher learning throughout the country as well as by staff members of agencies for the blind. Much advice has been given by mail in regard to term papers, masters' theses, and doctors' dissertations. A growing number of students have also consulted the Library in person.

In addition to her regular duties the Librarian has been at work on the preparation of two volumes of much value to workers for the blind. BOOKS ABOUT THE BLIND: a Biblographical Guide to Literature Relating to the Blind, has just come from the printer. This publication, made possible through a grant from the

Carnegie Corporation, will, it is believed, form an indispensable index to literature relating to the blind in both English and foreign languages. It will greatly aid students of work for the blind in discovering and evaluating in advance books and articles on every phase of work for the blind. It includes an annotated list of 2,700 books. MORE OF THE BLIND, which will supplement an earlier volume WHAT OF THE BLIND? will be available in the autumn.

Professional Standards

With the rising standards of qualification for personnel in social agencies there is a serious shortage of trained workers with the blind. As a result, many social workers from other fields are being brought into work with the blind and must acquire on the job the necessary special knowledge of the problems of blindness. The Foundation is helping to provide some of this special knowledge by means of individual conferences, institutes, cooperation with schools of social work, and participation in state and national conferences of social work.

We are also faced with the problem that many workers now employed in agencies for the blind are without the basic training in fundamentals of social work which are coming to be more and more required. To enable such workers to improve their professional preparation, the Foundation has in the past few years awarded several scholarships to experienced blind workers who wish to attend approved schools of social work.

Scholarships

In addition, professional training in social work is being provided for young blind persons who wish to prepare for service to their fellow blind. Two blind students, holders of Foundation scholarships, are graduating from approved schools of social work this month, and both have earned the highest praise from the authorities of their respective schools. Four other Foundation scholarship holders have been enrolled in social work training courses, and two others have taken special training for the education of the young blind. Practically all of our scholarship students who have trained for the field of social work are now employed, and it appears to offer one of the most favorable vocational opportunities for properly qualified blind persons.

Committee on Statistics of the Blind

The Committee on Statistics of the Blind, sponsored jointly by the American Foundation for the Blind and the National Society for the Prevention of Blindness, has continued its work during the past year. The activities of this committee are reported on by Miss Evelyn C. McKay in another part of these proceedings.

Special Services to Individual Blind People

The Foundation continued during the past year to supply free radio receiving sets to blind people. Four hundred and twenty-five have been distributed during this period. It has also continued to supply identification coupon books to blind travelers which enables them to be accompanied by a guide on common carriers without paying an additional fare—1,447 railroad coupon books; 338 bus coupon books. It has sold 157 especially-adapted watches during the past year.

"NEW TRENDS IN METHODS OF INSTRUCTION"

BERTHOLD LOWENFELD

American Foundation for the Blind

It seems appropriate to review now and then the trends in the methods of instruction in our special field and to compare them with those in the general field of education. I shall not attempt discussing all new phases in the educational life of

today, but will rather limit my observations to **methods of instruction** because such methods are usually the practical results of changes in underlying principles and, therefore, easier to determine than the philosophical background. What are the main innovations in methods which have appeared on the horizon and made headway in the general field of education? Two very important contributions have been made which have influenced classroom work and teaching whether applied consciously or unintentionally. I am speaking now of the application of "progressive teaching" and the use of technical devices developed and offered to the teacher. Progressive teaching is based on and supported by new findings in the field of psychology, particularly the psychology of learning, while the technical development is founded on recent innovations which have popularized movies, talking pictures, the radio and records.

Progressive teaching, which is characterized as "learning by doing," implies active participation of the pupil in the acquisition of knowledge. It has changed the classroom procedure in which the teacher and the book represented the main source of information and where material was transferred to the student by a psychological process based on the theory of the psychology of association — a mechanical conception of learning.

The "new education" requires not the passive taking in of knowledge, but the active acquisition of it; stresses the importance of the project method in which a given situation is experienced as a whole— a unit, and is supported by the theories of the Gestalt psychology where learning by insight is regarded as the essential factor. The school of Gestalt psychology refuses to accept a perception as a sum of sensations or to believe in an analysis of psychological phenomena into their elements. The perception itself can only be understood as a totality, as a unified whole, as a "Gestalt." It is more than the sum of its parts and is determined by the totality of the stimulating conditions. "Gestalt psychology attempts to get back to naive perception, to immediate experience 'undebauched by learning'; and it insists that it finds there not assemblages of elements, but unified wholes; not masses of sensations, but trees, clouds, and sky." 1.

Woodworth in his **Contemporary Schools of Psychology** states that: "The stress of Gestalt psychology is on the perceptual factor in learning. Learning means doing something new. The newness cannot be understood by examining the motor performance alone, for the newness consists in a reorganization of the situation so as to bridge the gap between the situation as it is and the goal. The gap is bridged by seeing the situation as a pattern including and leading to the goal." and "When an individual undertakes a task, or embarks upon a performance, even if it be simply a task assigned him as subject in a laboratory experiment, tensions are generated in him which are not relieved till the task is completed. These tensions amount to a 'quasi-need,' analogous to the organic needs, though only temporary."

These new points of view have infiltrated our teaching practices. In applying the principles of "learning by doing," teachers of the blind are at once confronted with the problem that the blind child lacks fundamental elements indispensable to this type of teaching, I mean actual concepts of objects of his environment. Our instruction until not long ago, was "verbal" to such an extent that it was left almost entirely to the child himself to acquire whatever he could in the field of actually experiencing his surroundings. Within the last few years, some of our schools have started to collect and prepare educational models intended to give the blind child concrete experience. Models of block houses, farms, mills, ships, airplanes and buildings of various types have been made by WPA projects. Every care has been taken to construct them true to scale and in such a way that they may be easily taken apart. Teachers are now using this object teaching material whenever obser-

1. *Heidbreder, Edna. SEVEN PSYCHOLOGIES. D. Appleton-Century Co., Inc. New York,* 1933. *Page* 331.

vation of real-life situations is impossible or incomplete and whenever it becomes necessary to deepen or renew an observation. "The school models are not a fad but an efficient and workable means of bringing the blind child into actual contact with those things about which they attempt to learn. They play an important part in the education of the youngest as well as of the oldest child. They strengthen his spirit of inquiry and create social relationships which reach beyond the doors of the classroom and provide greater opportunity to live and learn naturally." 2.

This quotation from a teacher of the primary grades, stressing the spirit of inquiry shows exactly the ultimate purpose of this new method. The spirit of inquiry corresponds to the "tension" postulated as an essential factor in the theory of learning by the Gestalt psychologists.

Within the last decades a number of new tools have been offered to the public and have found their way into the classroom. The phonograph, moving pictures, silent and talking, and the radio have spread and their rise was accompanied by the hopes and expectations of educators. Even if these inventions have not revolutionized the routine of teaching, they have become valuable tools and supplementary aids in the teaching practice of today. In general, it is safe to say that the application of all technical innovations has led to a remarkable enrichment of teaching. It was certainly a fortunate coincidence that the changing philosophy of "the new education" paved the way for the adoption of such enrichment which would have been utterly impossible and out of place under the old regime of passive learning.

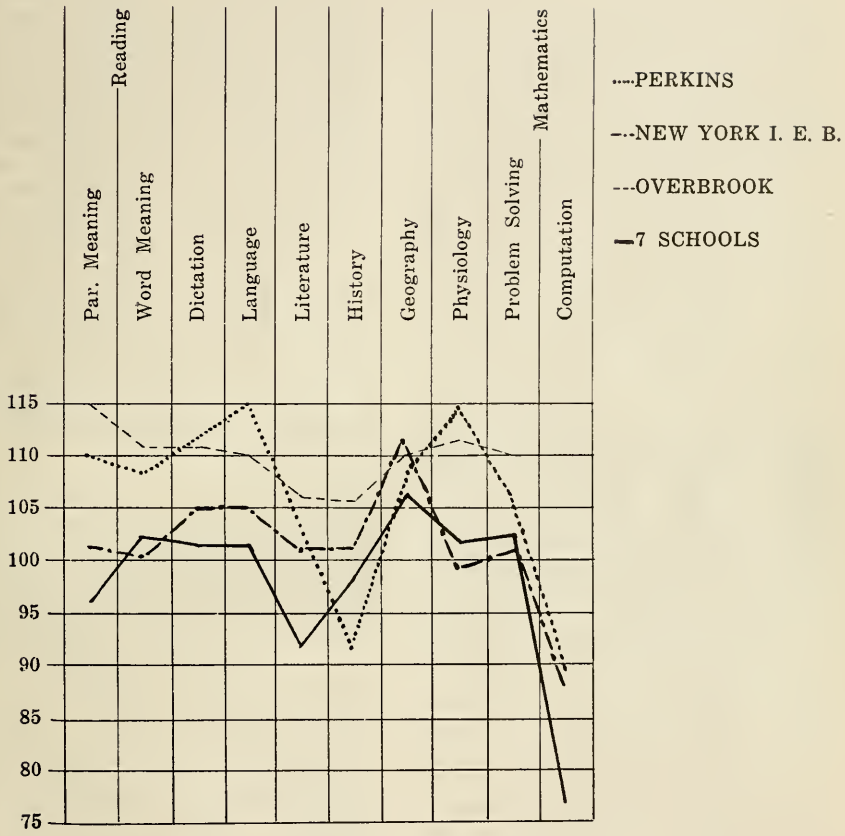
One of the recent inventions has influenced particularly the field of the blind. I am referring to the Talking Book— a variation of the common phonograph. One years' experience and experiments with the Talking Book as an educational medium in schools for the blind has already helped us determine certain principles for its application, and to outline plans for its future development. There are two ways in which the Talking Book may contribute to a better, more effective way of educating blind children: it serves as a time saver in the reading process and enriches as well as unifies teaching. Let me now elaborate on these two contributions. I do not have to tell you that braille reading is slow reading. Recent investigations have shown that even if we allow 2½ times more time for braille reading than for visual reading, a large percentage of blind children is unable to compete with print reading children of the respective grades. Translated into reality, this means that our children and students read only a fraction of what their seeing companions are able to cover in the same time. This situation is further aggravated by the fact that blind children must, so frequently, read where and when seeing children need only experience.

The effect of this situation is revealed by the results of the Stanford Achievement Tests in various schools throughout the United States. I am indebted to Dr. Samuel P. Hayes for his kindness in allowing me to use his material for demonstration. The Stanford Achievement Tests reveal the achievement of our children in ten tests: Paragraph Meaning, Word Meaning, Dictation, Language, Literature, History, Geography, Physiology Problem Solving and Computation. (The validity of the results of the Computation test has always been open to question.) I am now quoting from a letter of Dr. Hayes' "The first two tests, 'paragraph meaning,' and 'word meaning,' are intended as a measurement of reading ability, but since all the other tests except number three require the reading and writing of braille, they all give some indication of braille ability. However, the tendency of the curves to drop down in Literature and History as compared with Geography, would seem a pretty good indication that schools for the blind have not succeeded in giving their pupils the background in these subjects which they have been able to give in Geography."

The curves in this graph* illustrate

2. *Hill, O. J., ANOTHER BEAM OF LIGHT THROUGH THE DARKNESS in The Teachers Forum. American Foundation for the Blind, Inc., New York. Vol. XI, March 1939, #4. Page 64.*

* *Graph attached!*



Curves of Results of Stanford Achievement Tests.

clearly that the lowest achievement occurred in literature and history and this may also be noted in the individual curves for the three large Eastern schools and in the cumulative curves for seven schools.

If we ask now for the cause of this inefficiency we can give only one satisfactory explanation. It is the insufficient amount of reading done by our students as a necessary outcome of the use of braille. The literature test includes such questions as: "Twenty Thousand Leagues Under the Sea" tell of PUCK, CAPTAIN NEMO, UNCAS; Lord Fauntleroy always called his mother DARLING, DEAREST, HONEY; "The Crimson Sweater" is a story of ATHLETICS, LOVE, WAR; "Bob, Son of Battle" tells of a BOY, DOG, HORSE. The history and civics tests include such questions as: The man who invented the process of hardening rubber was EDISON, FORD, GOODYEAR; The "Rough Riders" were led by PERSHING, ROOSEVELT, SHERIDAN; The Boxer Rebellion occurred in JAPAN, CUBA, CHINA; Next in importance to agriculture in 1860 was MINING, LUMBERING, MANUFACTURING. All these questions presuppose a knowledge acquired by much and varied reading. Many of the literature questions may only be answered if the student has read the work, and many of the history questions refer to data which may be only sufficiently absorbed by extensive reading of historic literature. A seeing child—and the Stanford Achievement Tests were set up for seeing children—acquires a knowledge and deepens his understanding by supplementary reading which is at least as important as the textbook reading. The blind child by his slowness in braille reading is confined to a much smaller amount of actual reading and, therefore, cannot compete with the average student so long as his slowness in braille reading is not compensated for by another form of acquiring reading material. This is one contribution the Talking Book can and will make.

Another service which the Talking Book may render may be defined as "enrichment" in the broadest sense of the word. Seeing children bring into the classroom a variety of impressions and experiences which their surroundings offer. Their minds, open to the world at large, are flooded with pictures, sensations and concepts and it is the teacher's problem to utilize these for the advantageous development of the children in her group. Blind children present quite a different problem. Their enforced seclusion, remoteness, and natural tendency to egocentricity must be counteracted as much as possible by an education offering a plentiful supply of such material as is necessary for an adequate understanding of the surrounding world. A teacher of a class of blind children functions as a constant stimulator and "supply officer." It is, of course, important that the material presented to the children be deliberately chosen and prepared, for only then will it enlarge the limited range of the child's experience and materially contribute to the enrichment of his personality.

With reference to the methods to be applied for this purpose, we find ourselves in complete agreement with the recent developments in radio education as expressed by Dr. I. Keith Tyler. "The most heartening development in radio education in the last year or so has been the shift in emphasis in the broadcasts prepared for use in school. The shift is away from a preoccupation with information to a concern for such broad and important objectives as the development of new interests, the sensitizing to important problems in the immediate environment, the motivation of leisure-time activities, and the influencing of attitudes . . . As long as teachers were expecting the radio to be a talking textbook, as long as they judged its value in terms of the number of facts which children remembered, and as long as they approached even a radio drama with the attitude that it was of value only if it added to the stock of information, then just so long were they bound to consider radio education as a distraction from the serious business of preparing boys and girls for examinations. Now . . . broadcasters are producing programs which are based on

the assumption that an education is something vastly more significant than the accumulation of facts . . ."3.

Experience with the Talking Book and discussions with those responsible for its use have convinced us that it is not the educational task of the Talking Book in its present form to offer textbooks. For various reasons braille reading seems to be the more adequate presentation for this type of material. All kinds of study units, however, illustrated by sound effects and dramatizations will constitute one of the contributions of the Talking Book.

Certain conclusions may already be drawn from the use of the Talking Book in classroom instruction. Talking Books may be read in class—the children listening as a group and the teacher checking and explaining whenever advisable or necessary. A Shakespearian play, for instance, may be read in this way—or the students may listen to the play and read it in braille. This dual procedure of listening and reading at the same time has certain definite advantages. It makes the student actively co-operative, enables him to "auralize" the scenes he reads and gives him spelling, pronunciation and superior interpretation. For this reason a limited duplication of dramatic literature in braille and on the Talking Book seems justifiable.

More and more material will be made available on Talking Book records in the form of study units. Such units may serve as a central core around which the teacher may build the class project, or they may be read to supplement the various subjects whenever the teacher comes to the point where she can utilize the study unit as a whole or in part. The well-interpreted narration, the vivid dramatizations and realistic sound effects will all contribute to a lifelike presentation so necessary for children. The spelling of names and unusual words and a short description of the contents of each record page will be added at the end of the unit as an additional advantage.

3. *Tyler, I. Keith. RADIO IN THE SERVICE OF EDUCATION in Twenty-Sixth Annual Schoolmen's Week Proceedings University of Pennsylvania,* 1939.

Furthermore, the teacher has at her disposal a considerable amount of literature (listed in the catalog LEARNING BY LISTENING) from which she may select and assign to the student for home reading such works as she may deem useful and thus save time for those books which must be read in braille. We know that a number of schools are practicing this procedure, and we are confident that in this way our blind students will become acquainted with many more books than has been heretofor possible. I would like to mention now the books for the lower grades which the American Printing House has been offering to the schools with such gratifying response. They are intended to be used with children who are not able to read or enjoy braille books and are, therefore, dependent upon someone else to read to them.

As a final point let us consider the basic difference between the nature of vision and the nature of hearing and touch as a means of acquiring conceptions. Vision, the major sense faculty of the seeing, relays perceptions with a high degree of reality and accuracy. The sense of hearing, which serves the blind as the main source of information, brings to them only an abstract form of emanation which must be supplemented by tactual perception in order to become a concrete experience. From this point of view, the co-operative application of the Talking Book and the teaching models seems to offer an ideal way for new educational practices in our schools. If you will envisage with me a teacher working with her children on such a unit as the Panama Canal—reading on the Talking Book ACROSS THE ISTHMUS, the story of the Panama Canal —experiencing with her class the dramatic history of the building of the canal and reliving the vivid scenes of a visit to the locks, and using in addition a model of a canal giving to the children a tangible experience of a lock system—I am sure you will agree with me that this constitutes a progress in our methods of instruction which will finally contribute to the achievement of a better place in a more normal life for our students.

"REPORT OF THE LEGISLATIVE COMMITTEE"

SUPERINTENDENT JOHN BLEDSOE, Chairman
Maryland School for the Blind, Overlea, Maryland

Mr. President and Members of the Association:

Your committee begs leave to report as follows:

In conjunction with the Legislative Committee of the American Association of Workers for the Blind, your Committee held a meeting in New York January 26, 1940.

The following members were present:

A. A. I. B.—Dr. Gabriel Farrell, John F. Bledsoe.

A. A. W. B.—A. C. Ellis, Alfred Allen, Col. L. L. Watts.

The meeting considered a number of bills which were introduced in the First Session of the 76th Congress, but most of them required no action on our part as it was felt by the Committee that they would likely die in committee. However, the Committee did carefully consider:

H. R. 1954 (Mr. Cole). A bill, the effect of which would be to open Stand Concessions in Federal Buildings to all classes of handicapped citizens. Referred to the Committee on Labor on January 9, 1939.

The Committee disapproved of this bill, but believed no action was necessary at the present time.

H. R. 4927 (Mr. Randolph) — S. 2802 (Mr. Shepard). A bill to amend the Act to authorize the operation of stands in Federal Buildings to blind persons, to enlarge the economic opportunities of the blind and for other purposes, approved June 29, 1936. This bill was introduced in the House on March 10, 1939, and referred to the Committee on Labor, which held a hearing before a Sub-Committee of the Committee on Labor on June 29, 1939, when Mr. Joseph Clunk spoke at length in support of the bill.

It was agreed that it presents controversial issues. After discussion, Colonel Watts moved and Mr. Ellis seconded the motion to approve the bill up to and including Section 5 (of the amendment)—that is, up to and including line 16 of page 3 of the bill as printed, and to oppose the rest of the bill. The Committee voted the motion unanimously. Believing that a further hearing of the bill is desirable, the Committee authorized and requested Colonel Watts to seek a hearing of the bill as soon as expedient; and the Committee suggested that Colonel Watts' request for a hearing should be supported by a copy of the motion passed by the Committee, which motion should bear the signatures of all the members of the two Legislative Committees. Accordingly, the Secretary of the meeting will secure signatures from each member of the A. A. W. B. Legislative Committee after which he will forward the motion to Mr. Bledsoe for similar action by the A. A. I. B. Committee so that the signed motion may then be forwarded on to Colonel Watts. The Committee further agreed that it would be desirable to invite interested friends of the blind to attend any hearing on the bill which may be granted.

Accordingly the following resolution was adopted:

"After consideration and discussion of H. R. 4927 we the undersigned members upon action voted unanimously to favor support of H. R. 4927 up to and including Section 5 (that is, up to and including line 16 of page 3 of the bill as printed). But we do not favor the rest of the bill as drawn."

It was signed by all members of the Joint Committee and forwarded to Colonel Watts.

Since that time an additional bill has been introduced which the Committee has not seen but understands that to all intents and purposes contains similar objec-

tionable features.

Recently another bill (Senate bill No. 3855) which is an amendment to Title X of the Social Security Act was submitted.

Members of the Committee were informed as to the content of this bill as follows:

This amendment introduced by Senator Josiah W. Baily of North Carolina provides that funds appropriated by Congress for Aid to the Blind can be used for the restoration and conservation of vision and the furnishing of rehabilitation and other services to the blind. This is a most constructive and necessary amendment for the following reasons:

1. Since blindness presents many special problems, a broader program of service is necessary. Many blind people now on the Aid to the Blind rolls could have their vision restored if there were funds available for hospitalization and operations. Others could profit greatly by home teaching services and many could be rehabilitated if funds were available for rehabilitation services. Because of the seriousness and many unusual problems resulting from blindness, complete idleness usually follows, so that the blind people themselves say that their idleness is worse than their blindness. Rehabilitation and constructive services for the blind are, therefore, a most essential part of the program of any agency dealing with the blind.

2. State Legislatures will be willing to give these funds if they can be matched by Federal Funds and those States carrying on such constructive programs for the blind will be penalized if such legislation is not enacted because State Legislatures continually threaten to discontinue such funds since they are not matchable by Federal Funds.

3. Sufficient funds are now appropriated under Title X to make these services available if this amendment liberalizing the law is passed.

4. Federal Funds are available for the crippled, dependent children and other groups, but are not available for the blind and visually handicapped and will not be available unless this amendment is enacted.

It is felt by those members of the Committee who have seen it that this is along the lines advocated by the Committee several years ago, and that it should receive our hearty support. It is questionable, however, whether the present congress will give it consideration.

The Committee has supported the Foundation in its legislation on behalf of the talking book.

Respectfully submitted,
John F. Bledsoe, Chairman
Dr. Gabriel Farrell
Dr. Merle E. Frampton
B. S. Joice
Dr. C. J. Settles

"REPORT OF THE EXECUTIVE COMMITTEE IN RELATION TO COORDINATION BETWEEN THE A.A.W.B. AND THE A.A.I.B."

W. G. SCARBERRY
Ohio State School for the Blind

A resolution passed at the Lansing convention of the A. A. I. B. in 1938 directed the Executive Committee of the A. A. I. B. to confer with the Executive Committee of the A. A. W. B. and take such steps as may be necessary to bring about a closer co-operation between the two organizations. Pursuant to such instruction, the Executive Committees of the two organizations met in Louisville, March 17, 1939, and after prolonged discussion voted unanimously to the respective associations the following:

1. That the present Legislative Committees of the A. A. I. B. and the A. A. W. B. function coordinately, and that there be added to the present membership of the two Legislative Committees the Presi-

dents and Secretaries of the two Associations; and

2. That the two Associations consider the desirability of holding a concurrent convention in the same city in 1942, and that during this convention there be held joint meetings as the Executive Committees of the two Associations may deem wise.

The action of the A. A. W. B. is found recorded on page 5 of the Proceedings of the Eighteenth Biennial Convention held in Los Angeles in 1939.

"The Minutes of the Joint Meeting of the Executive Committees of the A. A. I. B. and the A. A. W. B. (see page 67) were then read by Mr. A. V. Weir, Toronto, Canada. Colonel Baker moved that these Minutes be received by the Convention and filed. This motion, seconded by Colonel Watts, was unanimously approved."

It is now a matter for the A. A. I. B. to decide if a joint meeting is desired in 1942 and if so the Executive Committee for 1941 and 1942 should be instructed to cooperate with the Executive Committee of the A. A. W. B. in selecting the time and place.

REPORT OF GUIDANCE COMMITTEE REPRESENTING A.A.I.B. AND A.A.W.B.

Read By BENJAMIN BERINSTEIN

The Committee on Vocational Guidance of the American Association of Workers for the Blind is pleased to take advantage of the opportunity to report to your Association on the work which we have attempted to do since your meeting at Lansing two years ago. At that time we recommended that a joint project for the study of vocational guidance for the blind be set up; reported to you on visits made to eight residential schools for the blind, and discussed in some detail our objectives and our hopes.

At your last convention you approved the work which had thus far been attempted by our committee and particularly the visits to the schools for the purpose of explaining the program for the vocational guidance of blind youth as reported to your Association by Dr. O. H. Burrit at your Raleigh Convention in 1936. We were encouraged to continue visits to the schools with the idea of presenting the program to as many schools as possible, particularly those in the middle west and the south, and by discussions with teachers and students giving a real impetus to vocational guidance for the blind. In cooperation with Mr. Green, the Chairman of your Vocational Guidance Committee, plans were worked out pursuant to which eight schools in the middle west were visited in April and May, 1939. The visits were made by Mr. Berinstein, the Chairman of our committee, and included the following schools: Western Pennsylvania, Michigan, Wisconsin, Minnesota, Iowa, Illinois, Missouri and Indiana. In all of these schools, Mr. Berinstein was cordially received and given every opportunity to carry out his work. Board and lodging were graciously provided by the schools, thus reducing the cost of the visits. At all the schools, interviews were had with individual students for the purpose of explaining to them the vocational guidance program and its objectives and of getting some idea as to the way in which blind youth are thinking. In all the schools but one, discussions in the nature of open forums were held with groups of students, usually the high schools students, and with the teachers and staff as a group. Several of the superintendents commended the purpose of the visits and the results obtained, and expressed the opinion that the work was "very worthwhile." At one school the outcome was "a decided impetus in the vocational guidance work"; at another "inspiration and courage were imparted to both students and faculty"; at another there resulted "a re-awakening of interest of facts in vocational guidance." One school visited gave in appreciation, at the conclusion of the visit of the Chairman, an unsolicited contribution of $25.00 to the work of the committee.

Although it is perhaps a minor matter, some reference should be made to the cost of these visits. The actual expense of the

visits to the eight schools above mentioned was $153.00 provided as follows: $30.00 generously presented by the Pennsylvania Institution for the Instruction of the Blind, as an expression of their interest in vocational guidance for the blind; $25.00 by the Iowa School for the Blind; $25.00 by the Missouri School for the Blind; $25.00 by the Illinois School for the Blind; and $48.00 by your own Association.

When Mr. Berinstein visited the Missouri School for the Blind, plans were worked out for visits to eight or ten schools in the south. It was felt that these schools should have the opportunity of having the vocational guidance program presented to them and discussed by and with their teachers and students; but subsequently these plans had to be abandoned. Two southern schools were included in the first group of schools visited—North Carolina and Tennessee. The superintendent of the North Carolina school later wrote: " . . . the children enjoyed very much their conferences with him (Mr. Berinstein). Of course, we cannot tell at this time how much permanent benefit can be derived from it, but we feel that such visits will be helpful and hope that they may be continued." The superintendent of the Tennessee School, writing to a person not associated with this committee, said: "I am happy to advise that the members of our local Vocational Guidance Committee are unanimous in their approval of the vocational guidance program sponsored by the A. A. W. B. The staff and students . . . feel as if his (Mr. Berinstein's) visit was one of the most profitable during the year. . . . We would like to see the work continued and expanded if possible."

It will thus be seen that the vocational guidance program presented to your Association by Dr. Burritt has now been brought to sixteen schools in fourteen states. Whereas when Dr. Burritt made his report, there was not one school in the United States which could be said to have a vocational guidance program, the committee now knows of at least eleven schools which have such programs and where vocational guidance is receiving active attention from staffs and students. Requests for cooperation and suggestions frequently come to us, and by invitation of the schools concerned, the committee is now actively participating in the vocational guidance programs of four of the schools. This would seem to be one of the important functions of a committee on vocational guidance for the blind.

Another function of such a committee is, of course, the continuance of the pioneer work necessary to present the program to all of the schools in the United States and Canada. We have considered with great care all possible methods of accomplishing this much-to-be-desired end and have become convinced, as we indicated in our last report to your Association, that by far the best method is that of personal visitation to the schools by a competent person who not only has the necessary knowledge but has the enthusiasm which is essential for pioneering in any field. Only one-third of the schools in the United States have been covered. It is our earnest conviction that funds should be found to cover the remaining schools in the very near future.

The visits to the schools and inquiries made by our committee indicate that while a great deal of attention has properly been given to the curriculum made available to blind boys and girls, not enough consideration and action has been provided with respect to matters outside the curriculum. We hear it said frequently on behalf of the schools that the agencies for the adult blind do not provide opportunities for employment to the graduates of the schools. The agencies on the other hand often say that the schools do not provide adequate training in the fields in which employment might be secured. All of this indicates the need for two things: First, continuous and unending attention to the development and training of personality, and second, a program of cooperation between the schools and the agencies for the adult blind coupled with the coordination of their efforts on behalf of individual boys and girls.

We submit that the acquiring of book knowledge is less than half of what our blind boys and girls require. No matter how good a product is, its sale depends to a very large extent on the package in

which it is offered. Techniques must, therefore, be developed, capable of furnishing to our boys and girls what they need for development and training in fields other than book knowledge. In this phase of the problem, we cannot rely on the teacher alone. All members of the staff of the school must be brought into the picture and must be made to feel their responsibility for the habits, behavior and personal appearance of every student in the school, and every student must be impressed with the fact that his book knowledge will carry him almost nowhere without the right kind of personal appearance, habits and personality.

The agency for the adult blind operating in the particular community where each student is to go on graduating, should be brought into the picture while the student is still in school and should have an active part in working out the student's ultimate plans. Guidance is the business of the school; but that which makes guidance effective, namely placement, is the business, at present at least, of the agency for the adult blind. The two things cannot exist successfully in separate compartments without means of ingress and egress.

From time to time we have been asked why we have not suggested new vocations for the blind. There seems to be a feeling that this is the principal need in our work, a feeling probably due to the fact that owing to the depression, it has become exceedingly difficult to find opportunities for employment for our blind people. This committee feels that its functions are limited to the preparation and development of vocational guidance programs for blind youth and blind adults; the presentation and explanation of these programs, and the doing of all that may need to be done to secure the adoption and the effective carrying out of vocational guidance programs. It is not within our functions to study vocations as such or to carry on the research and experimentation necessary for this kind of work.

You will observe that our committee is made up so as to represent the schools and the work for the adult blind. It is apparent that real progress cannot be made without a much closer relationship between your Association and the A. A. W. B. than now exists and without a real coordination of our efforts to deal effectively with the problem of vocational guidance for the blind in its fourfold aspect, namely, helping the student to find his vocation, seeing to it that he receives proper training, providing adequate placement services, and insuring adequate supervision and follow-up. Besides, what is done for the boys and girls in the schools will necessarily have definite and far-reaching effects on what may be done for that larger group of blind persons not educated in our schools, and the experience gained with this group must necessarily have its effect on the work in the schools.

In order to bring about this closer relationship and this effective coordination, we venture to suggest that there be set up at once what may be called an American Committee on Vocational Guidance for the Blind, to be composed of two superintendents or principals of schools for the blind appointed by the President of your Association, two executive heads of agencies in the field of work for the adult blind, to be appointed by the President of the A. A. W. B., and a chairman, who preferably shall not hold an executive position in either field but who shall be fairly conversant with the work for the blind in its various aspects and who shall have the drive and enthusiasm necessary to make the work of any committee effective. The chairman shall be appointed by the four members of the committee. This committee should act as a joint committee representing both associations. It should be financed by the two associations jointly, the funds to be appropriated from the treasuries of the two associations and where possible, from other sources. The setting up of this joint committee will not conflict in any way with the plan proposed at the Los Angeles Convention of the A. A. W. B. looking to the setting up of a project by the American Foundation for the Blind for a study of vocational guidance for blind people. This project is for research. Our proposed joint committee plan contemplates effective action.

Pleased as we naturally are with the progress thus far made, we make bold to say that a new impetus will be given to the vocational guidance movement and progress heretofore thought impossible will be made within a very short time if the plan here suggested is adopted and the committee appointed proceeds actively as it undoubtedly will to carry on from the point we have reached. We would urge that this committee extend the program of visits to the schools and study the relationships now existing between the schools for the blind and the agencies for the adult blind in the several states with a view to determining what cooperation and coordination, if any, exists and how effective the program is. Where cooperation and coordination do not exist, the reasons for the situation should be ascertained and stated fearlessly and frankly, to the end that responsibility may be fixed and the unfortunate condition corrected.

A beginning in this direction is being made by our committee pursuant to a direction given by the Executive Committee of the A. A. W. B. A study of the relationships existing between the work for the education of the blind and the work for the adult blind in the Commonwealth of Massachusetts has been undertaken and will probably be completed in the fall. It is expected that if our committee continues to function, one or two other states will be studied before the 1941 convention of the A. A. W. B. However, if the plan for a joint committee here proposed is adopted, that committee will, of course continue the study we have undertaken.

In conclusion, this committee expresses its appreciation for the cordial help and cooperation it has received from Mr. Green, the Chairman of your Vocational Guidance Committee, and from many superintendents, principals, teachers and students in schools for the blind. We hope that the work which has thus been commenced will be continued and will grow from strength to strength.

Benjamin Berinstein, Chairman
A. E. Cowgill
Stetson K. Ryan

SEVENTH SESSION

THURSDAY EVENING, JUNE 27—8:00 TO 10:00 O'CLOCK

"REPORT OF THE AMERICAN PRINTING HOUSE FOR THE BLIND"

A. C. ELLIS
Superintendent, Louisville, Kentucky

I trust that you will forgive me for beginning my report with a purely personal note. This Convention marks the tenth year of my association with the American Printing House for the Blind as Superintendent. Before presenting formal, routine statements concerning the work and activities of the institution during the biennium under report I feel moved to express my gratitude and to acknowledge my obligation to the instructors of the blind for the loyal support and heart-warming encouragement they have given me. For me and my family, the past ten years have, indeed, been happy and inspiring ones. We are humbly grateful for fine friendships formed.

I. Research and Experimentation: In the past two years, the management of the Printing House has given serious thought to the problems incident to improving the methods for selecting, producing and distributing books and appliances for the blind. Several serious studies have been made in this connection. First among these is Mrs. Herman I. Riddell's "Survey of the Reading Interests of the Blind." The results of this survey have been published in the **1939 Proceedings of the A. A. W. B.** and **The Library Journal** for March 1, 1940.

During the past year, a study of the status of instruction in foreign languages in the schools for the blind was made. The schools were asked to supply detailed information relative to the number of pupils under instruction in each foreign language, the extent of the courses offered and to make recommendations covering additional texts and supplementary materials needed in these classes. The results of this study will be available when the schools open in the fall.

There has been extensive experimentation looking to the improvement of appliances. We expect soon to announce the successful completion of an upward-writing, key-action Braille slate. It is expected that this slate will contribute substantially to greater ease and economy in the instruction of the blind in mathematics. There is even the probability that this slate may replace the traditional slate or Braille writing frame and stylus. We are indebted to Mr. Paul W. Hoff and the Minnesota School for the Blind, Faribault, for the original model of this appliance.

Realizing that the Talking Book may become an ever-increasing factor in the educational program, and that the free distribution of suitable reproducing machines for the records may profoundly influence the wider acceptance of this approach to literature, we have endeavored to produce models of such machines designed to meet the peculiar needs of students. Two such models are on exhibition at this meeting. The smaller one is intended for individual or small group use. The other is a more elaborate model intended for the use of larger groups, such as the classroom or auditorium. The immediate production and distribution of these machines is not anticipated. It should be recorded here, however, that the Printing House is prepared to supply such machines to the schools out of the Federal appropriation, whenever they are needed and not obtainable free of charge through other sources.

II. The New Hall Braillewriter: At last, the Printing House Braillewriter is a fact, not a myth. First, let me say that

no extravagant claims are, or should be, made for this writer. In its development, we have aimed at no radically new mechanical principle. All existing models were carefully analyzed by an experienced mechanical engineer. The essential qualities of a simple, durable and relatively inexpensive writer were cataloged. Early in this study, it was found that the original Hall Braillewriter still has great merit when measured by this standard. Further, I must confess a strong personal desire to keep Hall's name associated with the appliance which he gave to the blind. Accordingly, we decided to call our writer the "New Hall Braillewriter," and to simply add to the original Hall design certain additional features in common use in typewriters and Braillewriters. A line-spacer, back-spacer, margin regulator, and carriage release were added. The frame is cast in one piece and the carriage is welded into one unit. The die box is placed between the paper-roll and the holddown-roll, thereby making it possible to write to the very bottom of the sheet. Simplicity of design has been employed throughout the writer in order to reduce weight to a minimum and to keep production costs low.

Already we have tentative orders for 1500 of these machines for the schools. Present plans call for the assembly and delivery of from 50 to 75 of these machines per month, beginning in September. It will therefore take us at least two years to meet the requirements of the schools. Until this is done, we cannot place the writer on the open market and accept orders from individuals or agencies outside of educational institutions.

Our Braillewriter is chargeable to quota accounts, and the price of the first 500 will be $30 without a carrying case and $33 with a case. When the first 500 have been delivered, the price will be revised in line with production costs. The lowest price commensurate with costs will be established.

A catalog of parts and a handbook of instructions are being carefully prepared. The Printing House will undertake to maintain a repair service for the writers.

III. The Talking Reader's Digest: Beginning with the September, 1939, issue, a monthly recorded edition in addition to the Braille edition, of the **Reader's Digest** has been regularly issued. This project was made possible through the cooperation of the Reader's Digest Association, Pleasantville, New York. The recorded copies are now placed in regional circulating libraries for the blind, and preference in the distribution of the records is given to those who do not read Braille. This policy was adopted to enable the libraries to serve their readers who would otherwise be deprived of reading the magazine. This policy will be modified only when the non-Braille readers are fully supplied with the records.

The schools may receive the **Talking Reader's Digest** on their quota accounts. Free copies are available to the circulating libraries within the limts of the funds donated for this purpose.

IV. Some Trends Whch Affect the Printing House Program: Schools and libraries for the blind are showing an increased interest in the printing of fewer copies of many titles in preference to relatively large editions of fewer books. This places greater emphasis on embossing and proofreading, and proportionally decreases the amount of printing and binding. Such a policy certainly enriches our catalogs of embossed literature, but we must face the possibility of an increased per-volume cost. There have been advances in the prices of raw materials, such as paper, stereotype metals and bindery supplies. Minimum-wages and maximum-hour legislation may also operate to increase costs. Reasonable reserves have been accumulated to offset such eventualities, and every effort will be made to maintain present catalog prices. It seems advisable, however, to make a statement at this time of the possibilities which confront us.

One outstanding feature of the services of the Printing House in recent years has been the marked increase in the demand for periodical literature. Twenty-two Braille magazines are regularly issued, and plans are being made to publish at least

three large, nationally-known magazines during the coming year. It is just possible that the increase in magazine publishing will offset any retrenchment that may be necessary in the printing of Braille books.

There has been a very noticeable increase in the demand for more Talking Book titles for adult readers. With the wide distribution of Talking Book machines through the Library of Congress, it is only natural that there should be a growing demand for greater variety and quantity of Talking Books. Inevitably, we must reach the saturation point for Braille books for recreational reading, and Braille publishers must face this fact.

How far the WPA transcribing will affect the work of the Printing House is unpredictable. Already we have been asked by certain state directors to bid on the manufacture of Braille presses and stereotypers for such projects. Obviously, it would be unjustifiable for the WPA to set up rival printing houses and duplicate the work of the well-established presses. We have assurance from the National WPA Director that no projects for the establishment of Braille printing houses will be approved. The fact remains that the heads of certain state Braille projects would like to establish large Braille printing projects on a permanent basis. The state directors have had their arguments strengthened by the fact that a few of the heads of schools for the blind have endorsed the extension of the work of these projects, stating that they are unable to get from the Printing House special materials, such as state histories and geographies, and other materials of special and peculiar interest to their schools. Such statements were probably made by men new in the field who did not know we can and do print such materials, and that they are chargeable to quota accounts. In the future, I hope that all concerned can justify their state projects without using this argument, which is not only unfounded, but very harmful to our institution.

V. **The A. A. I. B. Committee on Braille Practices:** At the last meeting of this Association I suggested that the President appoint a special committee to study certain technical Braille problems and make recommendations. It seemed particularly important to decide upon the various grade levels at which the grade 2 contractions should be introduced. The Committee which was appointed has presented a very creditable report, and I hope that the Committee will be continued, as there are other questions in this area that need further study.

VI. **Acknowledgments:** We have talked long about cooperation in the field of publishing for the blind. At last, we have really done something. During the past twelve months, the Braille Institute of America has donated to the American Printing House for the Blind the embossed plates for more than 60 books. These titles have been placed in our latest catalog, and the schools will now be able to obtain copies on their quota accounts and at very attractive prices.

The National Institute for the Blind in London is now exchanging printed copies of Braille books and music for duplicate plates of other titles embossed at the Printing House.

The Illinois School for the Blind very generously loaned valuable plates to us for the purpose of making reprints available through our institution. The joint publication of other works is in progress.

The American Foundation for the Blind transferred its Braille equipment to the American Printing House for the Blind and gave us a contract to print Braille editions of **The Teachers Forum** and **The Outlook**. The staff engineers of the two agencies have held serious conferences and exchanged technical information in order to improve and extend the Talking Book services to the blind. The annotated Talking Book bibliography "Learning by Listening" was published jointly by the American Foundation for the Blind and the American Printing House for the Blind.

The New York Institute for the Education of the Blind very generously made it possible for the Printing House to print

and distribute both Braille and ink editions of Miss Madeleine Loomis' book "You Can Learn to Read Braille."

I am sorry that lack of space prevents me from naming all who have so generously cooperated with us during the past two years. It is a source of great satisfaction and encouragement that our colleagues have demonstrated their readiness to place at our disposal large and valuable catalogs of plates so that reprints may be made available to all of the schools as a part of our regular services.

"EXECUTIVE COMMITTEE REPORT"

SUPERINTENDENT W. G. SCARBERRY

Ohio School for Blind, Columbus

A meeting of the new Executive Committee was held at Lansing, Michigan, June 30, 1938.

Roll call was taken with President J. S. Ganey, W. C. Scarberry, Harold Wright, W. W. Spellings and J. G. Cauffman present.

The Secretary reported the new officers elected as follows:

President—J. S. Ganey.
Vice-President—Robert W. Woolston.
Secretary-Treasurer—Josef G. Cauffman.
Executive Committee: W. G. Scarberry, Chairman; Robert Morrow, W. W. Spellings, Paul J. Langan, Harold Wright.

It was moved by Harold Wright and seconded by W. G. Scarberry that 850 copies of the 34th biennial convention of the A. A. I. B. be printed and distributed according to the by-laws. Carried.

The Chairman of the Executive Board ordered that official stationery be printed with names of the new officers and new executive committee thereon, and same to be distributed to the officers as needed.

It was suggsted by J. S. Ganey that the Chairman of the Executive Committee be instructed to transact all necessary business during the interim—such as payment of necessary bills etc. This suggestion was put in the form of a motion by Mr. Wright and seconded by Mr. Spellings. Carried.

An invitation for the 1940 convention was received from Pittsburgh, Pennsylvania.

It was moved by Mr. Wright, seconded by Mr. Spellings, that the President be authorized to appoint a legislative committee for the new biennium, which he did, re-appointing: John F. Bledsoe, Chairman; M. E. Frampton, Gabriel Farrell, B. S. Joice H. M. McManaway. Carried.

It was suggested by Mr. Joice that the Program Committee make up the program now, so that teachers can study for the next biennium.

Adjourned.

Louisville, Kentucky.
March 17, 1940.

A meeting of the Executive Committee was called by the Chairman and held at the Brown Hotel, Louisville, Kentucky, at 10:00 a. m., March 17, 1939 with Chairman W. G. Scarberry presiding.

Present: W. G. Scarberry, J. S. Ganey, R. W. Woolston, and J. G. Cauffman, of the Executive Board, and W. E. Allen, of Texas and G. E. Lineberry, of North Carolina, Committee Members.

Some discussion regarding finances. Mr. Ganey moved, supported by Mr. Woolston, to pay the expenses of the members of the Executive Board and Committee Members, upon receipt of the bills. Mr. Scarberry called for a Yea and Nay vote. Motion was carried. Members whose expenses were to be paid were Mr. Bledsoe of Maryland, Mr. Allen of Texas, Mr. Woolston of Illinois, Mr. Lineberry of North Carolina, Mr. Ganey of Alabama and Mr. Scarberry of Ohio.

Committees represented at this meeting were: Committee on Certification of Teachers, Joint Findings, and Executive Committee.

Mr. Ganey moved, supported by Mr. Woolston, that committees desiring to meet where expenses are to be incurred, must first have permission from the Chairman of the Executive Committee. This motion was carried.

In regard to the certification of teachers, it was the decision of the Executive Committee that the Secretary of the A. A. I. B. be instructed to assume the necessary duties.

By order of the Executive Board papers for the next convention are to be limited to twenty minutes or two thousand words, and papers are to be accompanied by a resume for publication. It was decided that the publication of the proceedings for the next biennium will be kept to $600.00, proceedings to include an index for the last decade.

Mr. Ganey moved Mr. Woolston supporting, that Pittsburgh be selected as our next convention city. The last week in June was designated as the time, the dates being left for Mr. Joice and Mr. Scarberry to decide upon.

The Executive Committee allowed $100.00 each to the Joint Findings Committee and the Vocational Guidance Committee, as appropriated at the last convention.

The meeting adjourned to go into joint session with the Committee for the American Association of Workers for the Blind.

Josef G. Cauffman,
Secretary-Treasurer.

MINUTES OF THE JOINT MEETING OF THE EXECUTIVE COMMITTEES

of the

AMERICAN ASSOCIATION OF INSTRUCTORS OF THE BLIND

and

AMERICAN ASSOCIATION OF WORKERS FOR THE BLIND

March 17, 1939.

Pursuant to the resolution passed at the Lansing Convention of the A. A. I. B. in June, 1938, and concurred in by the Executive Committee of the A. A. W. B. at a meeting held October 19, 1938 that "The Executive Committee of the A. A. I. B. be instructed to confer with the Executive Committee of the A. A. W. B. and to take such steps as may be necessary to bring about a closer cooperation," there was held at the Brown Hotel, Louisville, Kentucky, at 11 a. m., March 17, 1939, a joint meeting of the Executive Committee of the two Associations with the following members present:

American Association of Instructors of the Blind:

Mr. J. S. Ganey, President, Talladega, Alabama.

Mr. R. W. Woolston, Vice-President, Jacksonville, Illinois.

Mr. Josef Cauffman, Secretary-Treasurer, Lansing Michigan.

Mr. W. G. Scarberry, Chairman, Executive Committee, Columbus, Ohio.

American Association of Workers for the Blind:

Mr. A. C. Ellis, President, Louisville, Kentucky.

Col. E. A. Baker 1st Vice President, Toronto, Canada.

Mr. C. L. Broun, 2nd Vice President, New York, New York.

Mrs. Mary E. Ryder, Secretary-General, St. Louis Missouri.

Mr. F. B. Iorardi, Treasurer Boston, Massachusetts.

There were also present at the meeting: Mr. W. E. Allen, Austin, Texas; Mr. Joseph F. Clunk, Washington, D. C.; and Mr. G. E. Lineberry, Raleigh, North Carolina.

Mr. Ellis called the meeting to order, stated the purpose of the joint meeting of the two Executive Committees and requested Mr. Ganey to preside during the balance of the session. On taking over the chair, Mr. Ganey announced for discussion the general theme: "Co-operation: How Can We Better Promote It?"

After a prolonged discussion, the two

Executive Committees, in joint session, voted unanimously to recommend to their respective Associations the following:

1. That the present Legislative Committee of the A. A. I. B. and the A. A. W. B. function coordinately, and that there be added to the present membership of the two Legislative Committees the Presidents and Secretaries of the two Associations; and

2. That the two Associations consider the desirability of holding a concurrent convention in the same city in 1942, and that during this convention there be held such joint meetings as the Executive Committees of the two Associations may deem wise.

Mr. Scarberry, seconded by Mr. Cauffman, moved that the thanks of the Executive Committees of the two Associations be extended to Mr. Ellis for his efforts and hospitality in arranging for the meeting. This motion was passed unanimously.

Meeting of the Executive Committee held June 25, 1940, in the office of the Secretary, at Pittsburgh, Pennsylvania:

Present: Mr. Scarberry, Dr. Spellings, Mr. Langan, Mr. Cauffman.

Minutes of the meeting held at Lansing June 30, 1938, and at Louisville March 17, 1939 were read and approved.

The financial statement for 1938-1940 was read and discussed. Mr. Langan questioned the wisdom of the Executive Committee for paying travel expense to the Louisville meeting. However, this item having been approved at Louisville by the Committee, no action could be taken at this meeting.

Moved by Dr. Spellings, seconded by Mr. Langan, that the financial statement of the Secretary covering interim expenses be approved.

Mr. Scarberry called for an aye and nay vote. All present voted aye. Motion carried.

Meeting adjourned.

"REPORT OF THE SECRETARY-TREASURER"

J. G. CAUFFMAN

Superintendent, Michigan School for the Blind, Lansing

FINANCIAL STATEMENT—A.A.I.B.—1938-1940:

RECEIPTS:

Memberships:	
45 Residential Schools—dues and assessments	$1824.05
3 Public Schools—dues and assessments	53.75
10 Libraries—dues	90.00
8 Commissions and other organizations for the blind	80.00
Sale of Proceedings	40.84
Payment of Dues in Advance	10.00
	$2098.64

DISBURSEMENTS:

Accounts Payable July 1, 1938:	
Thomas Siviter & Co.	$ 247.12
Letter file and ledger	9.52
Miscellaneous Office Supplies	1.74
Printing Stationery and Invoice Forms	31.37
Postage	15.00

Transportation on Supplies from Pittsburgh		5.43
Bank Charge—Printing 500 Checks		1.25
Travel Expense to Louisville—3/17/39		208.80
Vocational Guidance Committee		48.00
Joint Findings Committee		97.65
Services of Secretary-Treasurer:		
1938-39		250.00
1939-40		250.00
Printing Badges for 1940 Convention		5.92
Printing Programs—1940 Convention		60.77
		$1232.57

Certification of Teachers:

Printing Application Blanks and Certificates	26.31	
Express on Above	2.77	
Seal	3.50	
Postage Stamps	9.00	
		41.58
		1274.15
		$ 824.49

Received on Account of Teacher Certification:

78 Applications	$	79.00
Less:		
500 Postal Cards		5.00
Balance on Hand	$	74.00

"REPORT OF THE AUDITING COMMITTEE"

EDWIN PETERSON

President, Montana School for the Blind, Great Falls

The Auditing Committee of the American Association of Instructors of the Blind certify that the Books of Josef G. Cauffman, Treasurer, have been examined and found to be correct and in order.

Edwin G. Peterson, Chairman
F. M. Andrews

June 26, 1940.

"REPORT OF THE NECROLOGY COMMITTEE"

ANNIE RUTH PARR

Tennessee School for the Blind

Mr. Chairman: We have come to the part of our program where it is appropriate for us to pause and remember those who have gone before us and have by their example given us the courage and inspiration to carry on this worthwhile work.

May we think of each of them in the words of a great author who said,

"He builded better than he knew,
The conscious stone to beauty grew."

Jefferson City Association for the Blind

Jones, Orlando E.—of Jefferson City, Missouri, died January 27, 1939, at the age of 54. Mr. Jones was stricken with blindness when he was a very young man. He was the guiding spirit in the establishment of the Jefferson City Association for the Blind, now known as the Central Missouri Association for the Blind, and was its first superintendent during and after the World War.

Louisiana State School for the Blind

Hines Mrs. Louise B.—Field Agent for 13 years, Louisiana State School for the Blind, died October 10, 1939. She lived at New Iberia, Louisiana.

Michigan Library for the Blind

Higgins, Thomas C.—former librarian of the Michigan State Library for the Blind, Saginaw, Michigan, died on September 21, 1938. After graduation from the Perkins Institution, he toured the country on the concert stage. He was employed for many years by Grinnell Brothers Music House, Detroit. During this period he was engaged in work for the blind as Secretary and President of the Detroit League for the Blind. For the past 15 years he had been the librarian of the Michigan State Library for the Blind which position he held up to the time of his illness in May, 1938.

Michigan School for the Blind

Luke, Mrs. Eva—Girls' Housemother for the past five years at Michigan School for the Blind, Lansing, passed away at the school on the morning of June 15, 1939. She had just completed her year's work and was preparing to leave her department for the summer vacation when death overtook her. Mrs. Luke was an efficient conscientious department head and it has been difficult to replace her.

New York Association for the Blind

Finley, Dr. John H.—whose death occurred on March 7, 1940, was a most understanding and active friend of the blind for New York City and of the whole nation. As president of the New York Association for the Blind and Chairman of the New York Commission for the Blind, his name was linked "officially with work for the sightless." Unofficially he placed his abundant energy and enthusiasm behind the achievements of other agencies, and always gave his cooperation to the national organization, the American Foundation for the Blind. As a member of the editorial staff and later as Editor-in-Chief he used his pen in behalf of many worthy causes. His friends will remember him as a man who busied himself with the movements, the causes, and the agencies that aim for the betterment of mankind throughout the world.

New York Institute for the Education of the Blind

Harvey, Robert J.—Graduate of the New York Institute for the Education of the Blind, and Head of the Piano Tuning Department there for more than 25 years. Died 1939.

Wright, Harold William—Assistant Principal, New York Institute for the Education of the Blind from 1931 to 1939. Instructor in Methods of Teaching the Blind, Teachers College, Columbia University, from 1935 to 1939. Died June, 1939.

Montreal Association for the Blind

Layton, Philip E.—Born in London England, 1863, lost his sight at the age of 13, was educated at the Royal Normal College under the Principalship of Sir Francis Campbell. Came to Canada about 1890, and carried on a piano tuning and later a music business, finally being senior partner of Layton Bros., musical instrument business of Montreal. In 1908 Mr. Layton, associated with others assisted in the establishment of the Montreal Association for the Blind, with school facilities for English-speaking Protestant blind children. Several years later workshops were added. Mr. Layton died in September, 1939, at

the age of 76. His many friends and those who were served in the school or the workshops will never forget his keen interest in the welfare of his sightless fellows.

Pennsylvania Institution for the Instruction of the Blind

Miller, Russell King—succeeded the great David D. Wood as the director of music at the Pennsylvania Institution for the Instruction of the Blind in Philadelphia. From 1910 he successfully carried on the work with his beloved pupils until 1932 when the condition of his health caused him to resign. He died in May, 1939.

Perkins Institution

Appleton, Hon. Francis Henry—served as President of the Corporation of Perkins Institution from 1898 to 1930. In addition to many public duties, he gave personal attention to the affairs of the Institution always helpful, efficient, considerate and cooperative, and remained an interested friend of the school to the end of his life, April 5, 1939.

Fitzpatrick, Paul E.—whose death occurred February 22, 1940, was elected a Trustee of the Corporation of Perkins Institution in 1920 and served to the end of his life, as his father had done before him, sharing in the duties and responsibilities of special committees and giving active consideration to the best interests of the school.

Holmes, Charles W.—who died on the 17th of April, 1940, was a distinguished alumnus of Perkins Institution. He was a notable musician and teacher of music, both in Canada and more recently in Hingham, Mass. He acted for five years as head of the Canadian National Institute for the Blind. He served as member of the Committee on Uniform Type for the Blind and on the Board of the Massachusetts Division of the Blind and as President of the Perkins Alumni Association for fifteen years.

Johnson, Fanny L.—whose death was recorded on the 11th of March, 1939, was the first kindergartner of the first separate and independent kindergarten for the blind in the country and carried on her beneficent work from 1887 to 1897. In addition to the benignity of her personality and instruction, she used her pen effectively in behalf of the school and supplemented the efforts of the founder Mr. Anagnos, in its establishment and in the maintenance and progress of its useful work.

Lindsay, Sir Charles W.—died November 7, 1939. As a former pupil of Perkins Institution he retained a deep affection for his alma mater, performing many acts of kindness in its behalf, which culminated in the substantial contribution that made possible the installation of a new organ, the centennial gift of former pupils of the school in 1932.

Monroe, Mrs. Abbie Pottle—special teacher to the deaf-blind from 1903 to 1912 and regular teacher in the girls' department of Perkins Institution from 1912 to 1917. After her marriage to Mr. William Monroe she made her home in Wilmington, N. C. to the time of her death in February, 1940.

Porter, Grace E.—who died on the 28th of January, 1939, was a successful teacher of Household Economics in the girls' Upper School of Perkins Institution from 1911 to 1916, initiating the work in Bennett Cottage, specially planned unit for such training in the plant at Watertown, Massachusetts.

Poulsson Anne Emilie—whose long and useful life closed on the 18th of March, 1939, was a pupil of Perkins Institution at the outset of her distinguished literary career. She studied and taught kindergarten methods and became most helpful to Mr. Anagnos in his initial work for this training for blind children. Her whole life was devoted to work for little ones, for whom she invented new games and her famous finger-plays and wrote stories and poems, as well as translating books from the Norwegian.

Roberts, Mary E. Wheeler—who died May 12, 1939, was a student in Perkins Institution from 1876 to 1890. As a widow,

after a happy home life with husband and children she became a home teacher of the adult blind in the southeastern part of Massachusetts, under the Massachusetts Division of the Blind, and continued that work until failing health forced her resignation in 1936.

Weston, Mrs. Emma Collidge—whose death occurred March 30, 1939, was graduated from Perkins Institution in 1877 and from Framingham State Normal School in 1881. She received kindergarten training under the Misses Garland and Weston, and was a special student for one year at Wellesley College. She taught in the girls' department of Perkins Institution from 1882 to 1891, before her marriage to Mr. James Weston, with whom she made her home in Hancock New Hampshire.

Royal Normal College

Campbell, Mrs. Guy Marshall—came to the Royal Normal College as a teacher in 1887 but left after six months to accept a position in a school for sighted children. A year later she returned to the college and in 1892 became the wife of Guy Marshall Campbell who was a teacher in the college. They labored together to uphold the high ideals of the college and in 1912 were appointed the successors to Sir Francis Campbell and Lady Campbell upon their retirement. In 1929 upon the death of her husband, Mrs. Campbell was appointed to the office of Principal, a position which she held until 1934. Because of failing health she resigned this position but continued to serve as a member of the Board of Governors rendering service to the work she loved so well and which had endeared her not only to the pupils, staff and Board of Governors but to her many personal friends. She died on November 1, 1939, at Warsap Notts, England, severing the last "Campbell link" with the Royal Normal College for the Blind, Upper Norwood, England.

Society for the Promotion of the Interests of the Blind in Cleveland

Sherwin, Prudence—died May 29, 1938. She was one of the founders of the Society for Promoting the Interests of the Blind in Cleveland," and the development of its program was always close to her heart. She served as an officer of the Society for thirty-two years. Work for the blind suffered a severe loss in death of this gracious and modest woman.

State Council for the Blind

Sinclair, Sydney Mervyn—born in Cedar Rapids, Iowa, January 30, 1885, died December 3 1939. Received his early education in England, also in Pottstown, Pa., and in 1906 graduated from Princeton University. In 1925 three years after losing his sight, was appointed by Governor Pinchot to the newly created Pennsylvania State Council for the Blind. He made numerous studies of prevention of blindness and work for the blind in England, Ireland, Scotland and France. He is recognized as an authority in this field. Among the accomplishments of the State Council for the Blind under Mr. Sinclair's leadership have been the raising of standards of qualification for prevention of blindness workers, the establishment of standards of ophthalmic examinations of applicants for blind pension, a program of pre-school testing (vision testing) which resulted in the first squint clinic to be organized in the Commonwealth and the establishment of the first eye clinic in a state-owned hospital to provide eye care in rural sections of the state. To Mr. Sinclair a blind man was "not an object of public pity, but a human being to be loved, trained to be self-supporting, educated, given medical treatment, and taught to live with himself and others cheerfully, intelligently, courageously." Quoted from a tribute to Mr. Sinclair written by the State Council for the Blind and published in the March issue of the Seer.

Respectfully submitted

Annie Ruth Parr
Georgie Lee Abel
Ethel K. Arthur
John Meldrum
Necrology Committee.

Miss Anna Holmgren, teacher of Domestic Science and Arts, passed away in Vancouver, Washington, May 24, 1940.

Miss Holmgren was born January 30, 1873, in Sweden and came to the United States when thirteen years old.

Practically her entire life was dedicated to instructing blind children. She spent about twenty years in the Kansas School for the Blind before coming to the Washington School for the Blind in 1918.

Not only was her work with her pupils very superior but her influence on their lives will be of lasting value.

"REPORT OF THE RESOLUTIONS COMMITTEE"

M. E. FRAMPTON

Principal, New York Institute for the Education of the Blind, New York

RESOLVED that the 35th Biennial Convention of the A. A. I. B. owes a deep debt of gratitude to Mr. and Mrs. Bradley Joice our host and hostess, for their many gracious acts of hospitality. Their entire energies during the past many weeks have been directed to the sole task of making our visit an event of maximum pleasure and profit and a memorable occasion in the historic annals of our convention meetings.

RESOLVED that the Convention express its appreciation to President J. S. Ganey of Alabama and the officers for their outstanding contributions to the progress of our Association during the past biennium. Under his leadership our officers have given wise counsel and effective administration. They have written a new chapter in our common efforts for increasing service to the blind child.

RESOLVED that the Convention express its gratitude to the following:

To Mr. Eugene L. Connolly, President of the Board of Directors of the Western Pennsylvania School for the Blind, for the invitation to hold this 35th Biennial Convention in Pittsburgh.

To the teachers, officers and all members of the staff of this splendid school for their labor of love in making our sojourn more enjoyable.

To the matron, Mrs. Crane, and the housekeeper, Mrs. Trego, for providing for our physical comfort and serving such excellent meals.

To the Alumni Choir and its Director, Miss Katherine Gift, for the unusual and inspirational service providing us with a concrete demonstration of their superior musicianship.

To the Mellon Institute of Industrial Research, the University of Pittsburgh, the Stephen Foster Memorial Association, the Pittsburgh Board of Education, the Pennsylvania State Department of Public Instruction, and the Pittsburgh Department of Public Safey for their fine spirit of cooperation in offering and furnishing their services and facilities.

To the Pittsburgh newspapers, the Pittsburgh Convention Bureau, the Pittsburgh Lions Club and the East Liberty Lions Club for their active interest in promoting the education of the Blind and the activities of the A. A. I. B. through fine publicity and effective cooperation.

To the following individuals, the sincere thanks of the entire Convention are given for their valuable contribution to our program: Curator Fletcher Hodges; Dr. C. M. Williamson Professor of Church History and Government, Xenia Theological Seminary; Dr. L. M. Smith, Chief Medical Examiner for Pittsburgh Board of Education; Dr. T. Ernest Newland, Chief of Special Education, Harrisburg; Miss Isabel Kim, Delegate from the Territorial School for the Deaf and the Blind, Hawaii; Mr. Reid Askar, Head of Special Education, Kingdom of Egypt; Mr. Natesha Mudalier, Principal of the Deaf and the Blind School, Mysore, India; Mr. Amal Shah, Teacher, Calcutta School for the Blind; Mr. P. T. Theron, Head of Handicapped Department,

Union of South Africa; and to the numerous individuals who furnished music for our entertainment. Also to the Boy Scouts of America for their courteous service as guides.

RESOLVED that a telegram be sent to Superintendent S. M. Green of Missouri, expressing our best wishes for his speedy recovery. The following telegram was sent: "Greetings from the Convention. Miss your genial presence. Wish you a speedy recovery." Signed J. G. Cauffman, Secretary of the A. A. I. B.

RESOLVED that since this day, June 27, 1940, is the 60th birthday of Miss Helen Keller, the Convention send a telegram to Miss Keller expressing our congratulations and best wishes. The following telegram was sent after the suggestion received from Colonel E. A. Baker, President of the A. A. W. B., that greetings be included from the A. A. W. B.:

"The 35th Biennial Convention of the American Association of Instructors of the Blind and the American Association of Workers for the Blind join in extending felicitations and very best wishes on the occasion of your 60th birthday." Signed J. G. Cauffman, Secretary of the A. A. I. B., and Alfred Allen, Secretary General of the A. A. W. B.

RESOLVED that the 35th Biennial Convention of the A. A. I. B. in assembly express its sincere appreciation to the American Foundation for the Blind for the outstanding contributions of the Director and the Editorial, Research Survey Staffs of the Foundation to our schools and to our special literature. The Convention also appreciates their willing and effective cooperation with the many committees and activities of our Association.

RESOLVED that the Convention instruct the Executive Committee of the A. A. I. B. to cooperate with the Executive Committee of the A. A. W. B. in planning a program and selecting the time and place for the joint meeting of the A. A. I. B. and the A. A. W. B. for the year 1942.

RESOLVED that the Home Teaching Course offered at the Pennsylvania Institute for the Instruction of the Blind at Overbrook, in conjunction with the Pennsylvania School of Social Work should have the endorsement of this Association.

WHEREAS it is recognized that many blind children may have their remaining vision conserved or improved by proper medical care and supervision; and

WHEREAS the schools for the blind are in an especially favorable position to emphasize the importance of such care for the children in their charge;

THEREFORE, be it resolved that the President of the A. A. I. B. be requested to appoint a Committee on Medical Eye Care for Blind Pupils to study the present procedures of the schools for the blind in this connection and to make recommendations likely to improve the eye care available to such pupils.

Merle E. Frampton, Chairman
Miss Lois V. Cox

Your Nominating Committee begs leave to report as follows:

For President—Robert W. Woolston, of Illinois.

For Vice-President—W. G. Scarberry, of Ohio.

For Secretary-Treasurer — Josef G. Cauffman, of Michigan.

Executive Committee:

B. S. Joice, Chairman, of Pennsylvania.
Charles E. Kaufman, of Colorado.
Edward H. Brayer of New York.
W. E. Allen, of Texas.
Mrs. R. H. Woodward, of Alabama.

Respectfully submitted,

John F. Bledsoe
C. J. Settles
J. C. Lysen
Eben L. Palmer
Robert Lambert

"PRESIDENT WOOLSTON'S SPEECH"

Superintendent of the Illinois School for the Blind, Jacksonville, Illinois

Mr. Chairman and members of this Association:

I consider it a very great honor and a very great privilege to be President of the A. A. I. B. and I'm very happy to have this privilege and honor. I am also conscious of the responsibilities connected with the office, but with your aid I shall try to fill the office to the best of my ability.

I am convinced that a speech is not expected of me at this time, and that I have two years in which to write an address—I am happy of that. But I want to take this opportunity of expressing my keen appreciation and my sincere thanks to the Nominating Committee and to the Association for your kindness to me and your confidence in me.

I'm sure that during the next two years I shall lean very heavily on Mr. Ganey. He has been so efficient and able in this office during the past two years. I'm sure Mr. Ganey will help me. I also want to say that I shall look to the Vice-President and members of the Executive Committee for advice and counsel, and to the members of this organization for your cooperation. I thank you for your kindness.

HV1788 c.7
A
American Association of Instructors of the Blind, 1940

Date Due

HV1788 c.7
A
AUTHOR
American Association of Instruc-
TITLE
tors of the Blind, 1940

DATE ~~LOANED~~ due	BORROWER'S NAME
~~JUN 26 '67~~	Mrs Alsch Bacher
~~DEC 14 '68~~	Linda Ritz
~~11-22-70~~	~~L. Leden~~

AMERICAN FOUNDATION
FOR THE BLIND INC.

c.4

Proceedings of the

37th Stated Meeting

of the

AMERICAN ASSOCIATION
Of
INSTRUCTORS OF THE BLIND

Held at the

Arkansas School for the Blind
Little Rock, Arkansas

JUNE 26-30, 1944

1853-1871: AMERICAN INSTRUCTORS OF THE BLIND
1872-1944: AMERICAN ASSOCIATION OF INSTRUCTORS OF THE BLIND

LANSING, MICHIGAN
CAPITAL PRINTING COMPANY
1944

OFFICERS

ROBERT W. WOOLFSTON, President ..... Jacksonville, Illinois

W. G. SCARBERRY, Vice President ..... Columbus, Ohio

JOSEF G. CAUFFMAN, Secretary-Treasurer ..... Lansing, Michigan

EXECUTIVE COMMITTEE

B. S. JOICE, Chairman ..... Pittsburgh, Pennsylvania

CHARLES KAUFMAN ..... Colorado Springs, Colorado

EDWARD H. BRAYER ..... Batavia, New York

W. E. ALLEN ..... Austin, Texas

MRS. R. H. WOODWARD ..... Talladega, Alabama

PREFACE

For some time past it has been evident to students using the proceedings of the American Association of Instructors of the Blind, that they were incorrectly numbered; the error occurring in 1871 at the time the name of the Association was changed. Therefore, this convention in Little Rock has authorized the Secretary to make the necessary corrections; hence these proceedings become the 37th. The word "biennial" is also omitted because of the four year interval since the last convention. Following is a list of Conventions in their proper order:

1st meeting: August 16-18, 1853 at New York, New York.
2nd meeting: August 8-10, 1871 at Indianapolis, Indiana.
3rd meeting: August 20-22, 1872 at Boston, Massachusetts.
4th meeting: August 18-20, 1874 at Batavia, New York.
5th meeting: August 15-17, 1876 at Philadelphia, Pennsylvania.
6th meeting: August 21-23, 1878 at Columbus, Ohio.
7th meeting: August 17-19, 1880 at Louisville, Kentucky.
8th meeting: August 15-17, 1882 at Janesville, Wisconsin.
9th meeting: August 19-21, 1884 at St. Louis, Missouri.
10th meeting: July 6-8, 1886 at New York, New York.
11th meeting: July 10-12, 1888 at Baltimore, Maryland.
12th meeting: July 15-17, 1890 at Jacksonville, Florida.
13th meeting: July 5-7, 1892 at Brantford, Ontario, Canada.
14th meeting: July 17-19, 1894 at Chautauqua, New York.
15th meeting: July 14-16, 1896 at Pittsburgh, Pennsylvania.
16th meeting: July 12-14, 1898 at Lansing, Michigan.
17th meeting: July 9-11, 1902 at Raleigh, North Carolina.
18th meeting: July 20-22, 1904 at St. Louis, Missouri.
19th meeting: August 21-23, 1906 at Portland, Oregon, at Vancouver, Washington and at Salem, Oregon.
20th meeting: July 14-16, 1908 at Indianapolis, Indiana.
21st meeting: June 28 - July 1, 1910 at Little Rock, Arkansas.
22nd meeting: June 25-28, 1912 at Pittsburgh, Pennsylvania.
23rd meeting: June 28-30, 1915 at Berkeley, California.
24th meeting: June 4-7, 1916 at Halifax, Nova Scotia, Canada.
25th meeting: June 24-28, 1918 at Colorado Springs, Colorado.
26th meeting: June 21-25, 1920 at Overlea, Maryland.
27th meeting: June 27-30, 1922 at Austin, Texas.
28th meeting: June 23-27, 1924 at Watertown, Massachusetts.
29th meeting: June 21-25, 1926 at Nashville, Tennessee.
30th meeting: June 25-29, 1928 at Faribault, Minnesota.
31st meeting: June 23-27, 1930 at Vancouver, Washington.
32nd meeting: June 27 - July 1, 1932 at New York, New York.
33rd meeting: June 25-28, 1934 at St. Louis, Missouri.
34th meeting: June 22-25, 1936 at Raleigh, North Carolina.
35th meeting: June 27-30, 1938 at Lansing, Michigan.
36th meeting: June 24-28, 1940 at Pittsburgh, Pennsylvania.
37th meeting: June 26-30, 1944 at Little Rock, Arkansas.

FOREWORD

EXPLANATORY STATEMENT TO THE MEMBERSHIP OF THE AMERICAN ASSOCIATION OF INSTRUCTORS OF THE BLIND

In December, 1941, Mr. B. S. Joice, Chairman of the Executive Committee brought up the question of the advisability of continuing plans for the regular biennial convention of the American Association of Instructors of the Blind scheduled to meet in Watertown at the Perkins Institution and the Massachusetts School for the Blind. The war was causing the cancellation of many similar conferences and restrictions on travel were beginning to be felt. Mr. Joice circularized the schools through their superintendents, on eight points; the questions and a summary of the answers follows:

No. 1 Are we justified in holding a general conference in a coastal area?
YES — 13 NO — 18

No. 2 Do you think it would be better to hold a general conference in an inland, more centrally located town?
YES — 12 NO — 16

No. 3 Do you think attendance would be reduced because of automobile-travel hazards?
YES — 26 NO — 4

No. 4 Do you think the money involved might be conserved for National Defense?
YES — 17 NO — 15

No. 5 Does a war emergency make a conference more necessary?
YES — 17 NO — 11

No. 6 If the general conference is not held, do you advise a conference of Superintendents only?
YES — 5 NO — 26

No. 7 If a general conference is not held, would you advise a conference of Superintendents and Executive Committees of national organizations?
YES — 9 NO — 22

No. 8 Do you think the constitution makes necessary the holding of a meeting?
YES — 3 NO — 25

As a result of this questionnaire the Executive Committee was asked to make an official vote as to whether or not the conference should be postponed. Under date of February 11, 1942, Mr. Joice reported to the effect that the Executive Committee in a unanimous vote had decided that a general conference of the American Association of Instructors of the Blind should not be held in 1942.

It was further suggested that the reports of the Committees and the papers already prepared for the conference should be collected by the Secretary and published in pamphlet form but the material prepared was so scanty that the Executive Committee decided against its publication.

No further effort to call a war-time conference was made until eleven superintendents attending the American Association of Workers for the Blind conference in Columbus, Ohio, July 14, 1943, requested the Executive Committee to plan a conference for the following year, stating:

> "It was further agreed that it would be wise to hold the meeting in the interior of the United States. Dr. Farrell willingly relinquishes any priority he might have because the meeting was originally scheduled to have been held at his place in 1942. Mr. Davis, of Arkansas, has cordially invited the organization to meet at his school. As you know he has a new plant and can take care of the meeting very nicely."
>
> "It is requested that the officers and executive committee of the A. A. I. B. give careful consideration to this combined opinion of the superintendents."

Pursuant to this request, the A. A. I. B. was again circularized in October, 1943, on the following points:

Are you in favor of holding an A.A.I.B. convention in the interior in June, 1944?

If so, state your reasons for thinking a convention essential.

State questions or problems which should be considered for inclusion in program.

Does your organization wish to extend an invitation as host to the convention? (probable date June 26-30, 1944)

By December 1st, 46 replies out of 65 inquiries had been received. 25 favored the convention, 15 were opposed and 6 were indefinite. Accordingly, as a majority had requested the convention, the Chairman of the Executive Committee proceeded with plans and Mr. Davis graciously invited us to Little Rock.

Although it has been difficult to reorganize the committees in some cases and to secure delegates from all of the schools, it is hoped that this convention will be a worthy successor to the long line of similar conferences of the past.

J. G. Cauffman, Secretary.

TABLE OF CONTENTS

—o—

	Page
Officers and Executive Committee	2
Preface	3
Foreword	4
Table of Contents	6
Address of Welcome, F. E. Davis, Superintendent, Arkansas School for the Blind	9
Address of Welcome, Rev. S. F. Bryant, President, Arkansas Employment Service for the Blind, Inc.	10
Welcoming Address, Hon. Homer M. Adkins, Governor of State of Arkansas	12
Response to Address of Welcome	13
Suggested Health Program for Schools for the Blind	14
American Association of Instructors of the Blind—Study of Medical Eye Care in Schools for the Blind—1942	16
Report of the Committee on English Blind Refugee Children	36
The Child of Low Intelligence — What Can Be Done for Him	37
The Value of Projects to Motivate Interest	42
Summary of Grade Teachers Section Discussion	44
Education of Partially Seeing Children in Urban and Rural Communities	45
Sight Saving in Residential Schools for the Blind	47
The Need for An Adequate Supply of Sight-Saving Textbooks and Some Possibilities for Obtaining Them	51
The Coordination of Public Education and Special Schools	54
Report of the Committee on Statistics of the Blind	54
A Review of the "Ohio" Study of Braille Classes in Residential and Public Schools	56
Social Adjustment in Residential Schools	60
Report of the Joint Advisory Committee on Research	62
Braille Contractions and Children's Reading Vocabularies	68
Report of the Legislative Committee of the American Association for the Instruction of the Blind	72
A Handicap Allowance for the Blind	75
Report of the Committee on Certification of Teachers of the Blind	79
"How Should We Meet Social Life Needs in Residential Schools for the Blind"	80
Some Suggested Changes In Instructional Procedure	81
Some Suggested Changes In Instructional Procedure (Discussion)	83
Report of the Committee on the Literary Course of Study	85
The Education of the Negro Blind in the United States	88
Bibliography of Education of Negro Blind	91

TABLE OF CONTENTS

—o—

	Page
Report of Braille Committee	92
Program for Wednesday Evening	94
What's New In Testing the Blind	95
Reference on Hayes' "What's New in Testing the Blind?"	101
Report of the Joint Vocational Guidance Committee	102
Report of the American Foundation for the Blind	102
Cooperative Relationship with Schools for the Blind and Commissions or Other Rehabilitation Agencies for the Blind	104
Summary Discussion—Summer Jobs for Blind Students	107
General Discussion on New Vocational Subjects Being Offered in Schools for the Blind	107
Industrial Training at Overbrook	108
Vocational Guidance in the Pennsylvania Institution for the Instruction of the Blind	109
Thursday Afternoon Program	111
Abstract of Address on Courage	112
Report of the Credentials Committee	114
Report of the Executive Committee and the Secretary-Treasurer	116
Financial Statement	118
Report of the Auditing Committee	119
Report of the Resolutions Committee	119
Report of the Necrology Committee	122
Report of the Nominating Committee	127
Minutes of Business Meeting	128

ADDRESS OF WELCOME

F. E. DAVIS
Superintendent, Arkansas School for the Blind

I feel I have the most pleasant part on the program tonight and that is to welcome you to this gathering and extend to you the good wishes of those who have the honor of being your hosts. I am afraid that I cannot tell you how much pleasure and benefit we gain from your visit here. To us it is an honor and a privilege to have this opportunity of extending our friendship and participating in the joys of goodfellowship.

We are happy to have so many enthusiastic visitors with us, and we gain greater pleasure than ever before because this happy circumstance in our midst is in such contrast to the unhappiness elsewhere and the broodings and worries which we have for the future. We are living in an age of tragedy and despair, but our own land is an island of hope, happiness and good will. It is such happy and friendly gatherings as this which gives us hope and pleasure.

No wonder I say that it is a privilege and honor for us to be host to all of you and we most enthusiastically and sincerely bid you welcome.

Again let me say, we are delighted to have this Convention with us. We hope your short sojourn in our School will be one of pleasure and one of profit. You only have to let us know of any services we can render to you.

I do not wish to assume all of the honor in connection with this greeting. As you know, Arkansas is well recognized for its program for the Adult Blind under the direction of the Arkansas Employment Service for the Blind with Roy Kumpe, one of our former pupils, as Director. A great deal of credit is due Roy and his fine Board of Directors for the Adult Blind in this State. We have with us tonight Rev. S. F. Bryant, President of the Arkansas Employment Service for the Blind, who will extend greetings.

ADDRESS OF WELCOME

(Abstract)

REV. S. F. BRYANT
President, Arkansas Employment Service for the Blind, Inc.

First, I greet you as "World Citizens". Perhaps you think it strange that I say such, perhaps you consider that statement odd—an overstatement of the truth. Magellan is said to have sailed around the earth in 1083 days. A plane flying 330 mph does it in 43 hours flying time. A man walks a mile in 20 minutes—a plane flies a mile in 9 seconds. In 1800 a ship sailed the Atlantic in 20 days—an airship crosses the same in 16.5 hours. We all live in one back yard.

Henry David Thoreau was born in Concord, Mass. As a lad he helped his father in the manufacture of lead pencils—very soon he made a super-special lead pencil and decided to quit manufacturing such, saying that he would never excel what he had done. He picked up his belongings and hid away in a hut on yon side of Waldon pond. He raised his beans and corn and baked his bread Indian fashion. He tried to demonstrate to mankind that he could isolate himself—that he could live away from humanity—live the life of a hermit. One can't do that today.

Some storms pass over the land and leave every tree and house and person intact. Some storms are uprooting—demolishing — destructive — blowing down houses — plastering bodies against embankments—blasting trees—and life is never the same after they pass by. Life will not be the same after this storm of hate—revolution—and change have passed over this earth and spent its fury. Casualties, broken bodies, broken hearts, great loss will be in its wake. But one blessing will be that the whole world has been thrown together — we can never more practice isolation—I greet you as "World Citizens".

Second, I greet you as American Citizens. Caretakers—in Washington, New York, Richmond, Philadelphia tell of people coming to view important historic papers. Some look on intently—some bow in prayer—some bend down on knees and kiss the glass case indicating their deference and allegiance to the great tenets of our way of life.

Third, as a Citizen of Arkansas—I greet you. Arkansas has been greatly belittled. People all over the nation are illiterate when it comes to this state. They are grossly ignorant of its real glory and riches.

I shall never forget filling the pulpit in my home town. The minister introduced me as being from Arkansas. There was a titter—giggle—broad smile all over the congregation. I knew they were thinking of Bob Burns Slow Train Through Arkansas. I mounted the pulpit and said, "Friends of my home town—I am ashamed that people like unto you, supposedly of enlightened minds, are so untutored on the subject of Arkansas. Did you know that Arkansas has the only diamond mine in the United States? Is first in Bauxite? Second in Rice? Third in Cotton? In the South—third in Timber? Eighth in Petroleum? Has many coal deposits, Hot Springs, beautiful Ozark Mountains and is the birthplace of Douglas MacArthur? Home of Commodore Corydon Wassel?" That audience, that day, ceased thinking Arkansas a facetious subject, and began considering it in a more serious light.

I was in Theological School. I made up my mind there were two places I wouldn't go to, Mississippi first—Arkansas second. But I went to Mississippi first—Arkansas second. I was pleasantly surprised to find it progressive—cultured—and with great resources. If you build a wall around Arkansas—it can subsist by itself. I take pleasure in welcoming you to the Wonder State of Arkansas—Pulaski its most populous county—and Little

Rock, it's capitol city—known as the city of roses.

Fourth, I welcome you as Citizens engaged in a great work. What was it Nehemiah said when he was rebuilding the walls of Jerusalem? His enemies seeing that they couldn't deter him by threat, or force, finally said, "Let us call this man Nehemiah into the valley to compromise, temporize, and reason with us." They shouted to him to come down into the valley, and he cried back, "I am doing a great work and can't come down." You are engaged in a Great Work.

Some men are in "Evil" work—they have difficulty living with themselves. Some men are in work which seems so trivial—insignificant—a mere bagatelle—it doesn't command one's finest abilities.

I say this from an intimate knowledge of your labors. I have been a neighbor to this Blind School for some seven years. I know Mr. Davis intimately and his fine personnel and their excellent work. Periodically a contingent of blind pupils visit my church on Sunday morning. I have the distinct honor of being on the Board of the Arkansas Employment Service for the Blind, Inc., which has to do with supervising Vending Stands for the blind. Then for 7 years I have been a member of the Lions Club—and you know that club's keen interest in the welfare of those handicapped by blindness. I know first hand that yours is an ennobling task.

There are only a few dark spots on the map. Only now and then a slacker. Occasionally there is a little group who would make of these disastrous hours a political football. Here and there is a would be profiteer, and worst of all a striker, somehow I can't fathom the striker at this moment. But in the main, the modern American is behaving after the fashion of his brave forbearers.

Someone has said that America has a thumb in the form of the State of Florida thrust down into the warm Caribbean, a fist grasping for icebergs in the icy North Atlantic, the cool velvety loveliness of New England lawns, the black shadowed date groves of Phoenix, Arizona—under a sun that burns like a mustard plaster, graceful palms on Louisiana shores, white crests on the Sierra Nevadas which float like swans up into the tall blue skies, New York at night red with neon and a lone rider on a plateau out in Wyoming herding his sheep—America — a lavish land, turbulent with beauty and ruggedness, turbulent with hope and terror—America—a land that wears a thousand faces, and speaks ten thousand languages. Yes—I have really been looking within of late.

I suppose a man's vocation in life depends on his view point or his outlook. There was a meadow, woody glade, a knoll, and a winding stream. An Army engineer passed the scene—the meadow to him was a place to march troops; the woody glade a spot to plant a cannon; the hillock was a vantage point to view the enemy, while the winding stream was a locale to cover a hasty retreat. An artist passed the scene: the meadow to him was a foreground to his masterpiece; the woody glade the background, the hillock broke the monotony of the picture and the winding stream enlivened his work of art. A lover of nature passed the same scene; the meadow was a place to run and play on the green; the woody glade was a spot to hide from the scorching sun; the hillock was a high point to view the grandeur of nature; and the winding stream was a place to bathe his weary body. The same meadow—the same woody glade—the same hillock—the same winding stream—the same scene—but three different viewpoints.

I know your viewpoint is high—ennobling—wholesome because of your task —your task is such a lofty one.

Therefore, it gives me exceeding pleasure to extend to you the key of welcome to this city and locality, not as Mayor, for I am not a Mayor—not as County Judge, for I am not the head officer in the county —not as Governor, for I am not the head of the state—but as a private citizen may I extend to you this key of welcome and greeting, saluting you in all good faith and joy. Hoping you will have an instructive, inspiring, and pleasing time in our midst, and asking you to come our way again. I thank you.

WELCOMING ADDRESS

HON. HOMER M. ADKINS
Governor of the State of Arkansas

Mr. Davis, Distinguished Visitors and Friends:

I feel sure, after listening to Superintendent Davis and Rev. Simyril Bryant, that it is unnecessary for me to say anything to make you feel more welcome. However, due to my personal interest in the work for the Blind, I am pleased to be here on this occasion to help welcome you to the 37th Convention of the American Association of Instructors of the Blind.

We are particularly proud to have your organization hold your Convention this year in our state. This is the first time that Arkansas has had the pleasure of entertaining your convention for many years and I believe that it has been a long time since your convention has been held in the south.

The war and war industry will increase greatly the problem of services for the Blind. While it is difficult, under present traveling conditions to hold meetings, I feel it is most appropriate and timely that you are meeting to better plan for helping the Blind. I feel sure that with the leading educators of the Blind, meeting here this week to exchange views and experiences, much good will result.

I take particular pride in our state's being able to offer you such a good setting for this convention. It has been a pleasure as Governor to have been able in a small way to increase and improve the facilities of this school. Especially, as Governor, I have been interested in the educational program, and I want to take this opportunity to tell you that we think we have a mighty fine superintendent in charge of the Arkansas School for the Blind. It has been a scource of great satisfaction to know that our work for the Blind in Arkansas has been commended by the United States Office of Education. I feel that a large part of the credit for this is due Superintendent Davis.

Some recent improvements here have been the addition to the boys' Industrial Building and the erection of a Home Economics Cottage. The Vocational Program herein taught to the boys and girls will help many of them to become self-supporting citizens. War industry, in creating such a great demand for labor, has found a place for many blind workers. With proper guidance, I feel there are very few Blind people that cannot be adjusted to performing some job in American industry. The American people are generally aware of this fact now— and I feel sure that under your leadership the above goal will be reached.

I have noted with a great deal of interest the fine cooperation that exists between the Arkansas School for the Blind and other agencies interested in work for the Blind. I have particuluar reference to the vending-stand program sponsored by the American Employment Service for the Blind, and supervised by the Arkansas Department for Public Welfare. Much credit for this program goes to the Director, Mr. Roy Kumpe, who is here to-night and who is known by many of you.

After the war, the rehabilitation of the Blind will be a big problem. It offers a challenge to those interested in the Blind. It is encouraging to know that your organization is able to furnish such fine leadership. I trust that every individual and agency interested in services for the Blind will see fit to call upon you.

While we feel that our program for the Blind in Arkansas is a sound one, we realize that it should be improved and extended. We trust that your deliberations at this Conference will help you to do a better job back home. We feel sure that your coming here will enable us to get ideas that will help in our teaching and servicing the Blind.

RESPONSE TO ADDRESS OF WELCOME

ROBERT LAMBERT
Superintendent, Indiana School for the Blind

This response should have been made by our worthy President who is ill, and in his absence it should have been made by our Vice President who had the best excuse in the world for not being here; namely, that his son leaves for overseas and he wanted to say a last farewell. So it falls upon my shoulders to give this little response. I want to say to Mr. Davis and to his Excellency, the Governor, that we have felt most welcome. From the time we arrived at this fine school we were made welcome by Mr. Davis and his fine staff. I was also greatly impressed when I saw this fine school and had a good chance to get an overall view and was reminded of the quotation "A man's reach must exceed his grasp, or what's a heaven for." When I saw this plant, I knew that somebody in the state had some wide awake ideas about educating the blind. A great teacher once said, about education "Put a teacher on one end of the log and a student on the other." When I entered the door, (I got here early. I think I was the second one here) I met the Superintendent and members of his staff and I have formed this impression of this school: It not only has the finest in material facilities showing evidence of power, but in addition, in meeting this young staff and talking with them about their problems and seeing here the enthusiasm they have for their work, I was convinced that the education of the blind children of this State was in good hands. And Mr. Governor, knowing the governors of states have something to do with institutions, you should be congratulated for the good work with the unfortunate of your State. So we feel most welcome and glad we came, and we hope we can be good guests while here. Each and every one of us are going to carry back to our own institutions something from this school that will enable us to do a better job for the blind children of our respective states.

I am most happy to speak at this convention and hope you will invite us back sometime. You have been most gracious to us. Thank you so much.

SUGGESTED HEALTH PROGRAM FOR SCHOOLS FOR THE BLIND

DR. FRED WM. HARRIS
Arkansas School for the Blind

Mister Chairman, Distinguished Guests, Faculty Members, Ladies and Gentlemen:

It is a delightful privilege to come before this organization and discuss with you a "Suggested Health Program for Schools for the Blind".

The cardinal principles of education are, Health, Citizenship, Worthy Home Membership, Vocational Guidance, Command of Fundamental Process, Worthy Use of Leisure Time, and Ethical Character.

It is seen, therefore, that Health heads the list in the cardinal principles of education. A child who is not healthy cannot be expected to do good school work. This not only applies to the child with defective vision but to any pupil. Since our great peace-loving country has been brought face to face wth the horrors of war, it has been clearly demonstrated that health has been sadly neglected in our educational systems. This applies not only to state and eleemosynary institutions but also to our general educational program. This has been concretely illustrated by the numbers of men who have been rejected for Military Service due to physical disabilities.

Too often the child with defective vision is spoken of with pity and, in some instances, made to feel that he carries a stigma due to lack of vision. From the psychological standpoint, it is important to have the child with defective vision feel that he is a normal child and that he may take his place in society.

I have selected the Health Program for the Arkansas School for the Blind as a skeleton outline from which modified programs may be initiated in any school regardless of size. It is with pardonable pride that we call your attention to our own health program.

1. When the pupil arrives at the school, after registration is completed, he is taken immediately to the doctor and nurse where he is inspected for infectious diseases, scabies, and pediculosis. Any infected child is immediately isolated to prevent spread of disease.

2. All new pupils are carefully examined by the physician, the eye specialist, and the dentist as soon as their adjustment program is finished. All former pupils who are known to have defects are also given a complete physical examnation. A routine examination for all pupils is done by the school physician, the eye specialist, and the dentist as soon as possible.

3. Urinalysis and blood wassermans are done upon all new pupils. Also all former pupils who have had kidney trouble or are known to have a positive blood test. Any child who is found to have nephritis or diabetis mellitis is treated and special diets prescribed. All children with positive blood wassermans are treated for syphilis.

4. All pupils are measured and weighed upon admission to school. Pupils found to be under or over weight are weighed each month. All pupils are weighed three times each school year. The under weight and under nourished children have special diets prescribed for them and they have a special diet table so that they may get the recommended diet.

5. The Immunization Program is complete. All new pupils are vaccinated for smallpox, and immunized against diphtheria and typhoid fever. Each child is re-immunized against typhoid fever every three years. Special attention is called to the cold vaccine program. For the past two years we have been pleased to find that the incident of colds and the

school days lost, due to colds, have been reduced at least 35 per cent.

6. All new pupils are given the skin test for tuberculosis. If the child shows a positive test an X-Ray of the chest is made.

7. There are three clinic periods each day and the child who doesn't feel well may report for clinic. These hours are scheduled before school, at the end of the noon lunch period, and immediately after school so that the pupil doesn't lose time out of class. This clinic hour held by the school nurse also serves to check any pupil referred to the clinic by the teacher. The home room teacher has been of great assistance in preventing spread of colds and contagious diseases by having a short period of possibly five minutes at the beginning of school in the morning, and again in the afternoon, to check her pupils to see if there is evidence of colds, fever, headaches, et cetera. This reduces the spread of communicable diseases by sending the child immediately from the room to the infirmary. If the nurse thinks it is safe for the child to return to school, she writes the teacher a note stating so. If he is sufficiently ill, he is put to bed and seen by the physician.

8. Corrective work. The eye specialist has an opportunity to do a great service, sometimes by surgery, to restore vision to the level where a child may continue his studies in the public schools. Many tonsillectomies are done, and plastic operations, to improve the cosmetic appearance of the child.

The dentist always has a large volume of work to do and he does it very well.

9. Health Education. Programs each month are presented before the student body. This tends to make the children more health conscious. Light plays, pageants that have to do with health education and to inspire personal hygiene are presented. Once each year it is well to have a psychiatrist talk to the student body in reference to mental hygiene.

To encourage the children to better health goals, medals are given at commencement time to two boys and two girls who have made the most progress in health. One boy and one girl over 12 years of age and one boy and one girl under 12 years of age. Also a dental medal is given to a boy and a girl each year to encourage dental hygiene.

10. Playground Supervision. It has been found that the majority of minor accidents occur on the playground. It is highly desirable that children have playground supervision after school hours. This will reduce the number of accidents and will make for better sportsmanship among the children.

A well-rounded health program cannot succeed in any school without the wholehearted cooperation of the entire faculty. Specifically, in our program we have the cooperation of the home room teacher, the dietetian, and the physical education department.

The dietetian cooperates by planning special diets and seeing that the child eats.

The physical education department does a grand job in aiding in giving corrective exercise to the children who have defective posture, muscle in-balance and in generally building up a strong well-developed body.

The nurse has a major roll in the health program. Her outstanding qualifications should be, first, an interest in the child, and second a willingness to work beyond and above the usual call in the line of duty. Cheerfulness and kindness are wonderful attributes.

With the exception of the playground supervision, the ten point program outlined for you is now maintained at the Arkansas School for the Blind. A program of this nature cannot be attained in a short time. It takes the whole-hearted cooperation of the superintendent, the nurse, the faculty, the dietetian, and the physical education department. We are very proud of our program and feel that it is one of the best to be found in the entire United States.

Fred Wm. Harris, M. D.

AMERICAN ASSOCIATION of INSTRUCTORS of the BLIND STUDY OF MEDICAL EYE CARE IN SCHOOLS FOR THE BLIND–1942

Report on Survey of Medical Care of Eye Conditions Among Pupils in Schools for the Blind

The Committee on Medical Care of Eye Conditions Among Pupils in Schools for the Blind was appointed by the President of the American Association of Workers for the Blind in 1941, pursuant to a resolution passed by the 1940 convention, which read as follows:

"WHEREAS it is recognized that many blind children may have their remaining vision conserved or improved by proper medical care and supervision; and

"WHEREAS the schools for the blind are in an especially favorable position to emphasize the importance of such care for the children in their charge;

"THEREFORE, be it resolved that the President of the A. A. I. B. be requested to appoint a Committee on Medical Eye Care for Blind Pupils to study the present procedures of the schools for the blind in this connection and to make recommendations likely to improve the eye care available to such pupils."

The Committee undertook as the first step in its assignment a survey of the existing provisions and practices in regard to medical eye care in schools for the blind. A questionnaire sent out by the Chairman of the Committee elicited replies from 54 residential schools[1] for the blind, only two smaller private schools failing to report. Detailed tabulations and summary tables of the findings are attached, and it is hoped they may be published in the Proceedings of the Convention. A brief summary of the outstanding facts is all that time permits here.

Admission Standard in Regard to Degree of vision The majority of the schools reporting have a fixed definition of blindness, and there is substantial uniformity in the standards as reported although considerable diversity in phraseology.

Procedure for Pupils Who Do Not Come Within the Definition of Blindness The majority of schools do not admit pupils who are not blind according to the definition; eight schools admit them to sight-saving classes within the school.

Ophthalmological Service Available The majority of the schools enjoy the part-time services of an eye specialist, and in general the qualifications of such specialists meet a high standard. Not all schools pay for this service, however, and among those which do pay there is considerable diversity as to the method and amount of payment. There is also diversity as to the amount of time which the eye physician devotes to the school, but this is partly explained by variations in school enrollment.

Eye Examinations The majority of schools require a pre-admission eye examination and provide for another eye examination by the school's eye specialist within a short time after admission. There is, however, considerable variation in provision for routine re-examination of pupil's eyes.

Medical Care for Improvement of Vision In most schools, medical eye care is available for pupils whose parents cannot pay for such care. This service is frequently given by the school ophthalmologist but may be provided through University hospitals or other public agencies.

The questionnaires, however, do not provide sufficiently detailed information for definite conclusions as to the extent to which such services are utilized, their adequacy in respect to the needs of the

(1) In some cases the schools for the white and the Negro blind were reported by the superintendent as one school.

particular school or the results achieved and this whole aspect of the subject deserves further study.

Wasserman Tests Approximately 75 per cent of the schools require a Wasserman test on admission, and several of the others indicate that they frequently call for Wasserman tests.

SUMMARY

It is apparent that there are certain provisions for medical eye care which are already in effect in the majority of schools, and which might well be recommended for adoption as a minimum standard in all schools. It seems unlikely, however, that any recommendations made at this time could be carried out in the near future because of the wartime shortage of medical personnel. It is therefore suggested:

1. That the Committee on Medical Eye Care in Schools for the Blind be continued and asked to bring in definite recommendations for consideration at the first post-war convention; and

2. That in the meantime, the Committee give further consideration to the findings of the preliminary study and carry on such supplementary studies as it finds desirable.

G. E. Lineberry, Chairman

TABLE Ia. ADMISSION STANDARD IN RESPECT TO DEFINITION OF BLINDNESS

Total Number of Schools Reporting		**54**
Standard expressed in ophthalmological terms		29(1)
20|200 or less	28	
20|70 or less	1	
Standard expressed in general terms		12
Inability to read ordinary print	2	
Insufficient vision to make satisfactory progress in the public schools	10	
Standard expressed in percentage or fraction		5
20 per cent vision or less	2	
10 per cent vision or less	2	
1|10 vision	1	
Standard not specifically expressed		5
Standard not reported		3

(1) In four schools this standard is subject to modification in individual cases.

TABLE Ib. ADMISSION STANDARD IN RESPECT TO DEFINITION OF BLINDNESS

Name of School	Admission Standard of Vision
Alabama School for the Blind	Not reported[1]
Alabama School for Negro Deaf and Blind	Inability to read textbooks
Arizona State School for the Deaf and the Blind	20|200 or those who are or may become progressively worse[2]
Arkansas School for the Blind (White and Negro)	20|70 or less in either eye[3]
California School for the Blind	Inability to carry on regular school work by reason of visual disability

Colorado School for Deaf and Blind	20|200
Connecticut Institute for the Blind	20|200 maximum after correction
Florida School for the Deaf and the Blind (White and Negro)	Not reported
Georgia Academy for the Blind	Visual insufficient for education in the public schools
Hawaii-Territorial School for Deaf and Blind	Vision in the better eye with corrective glasses of less than 20|200, or a disqualifying field defect sufficient to incapacitate him for self-support
Idaho School for Deaf and Blind	Total or partial blindness
Illinois School for the Blind	20|200 degree of sight or less after refraction
Indiana School for the Blind	20|200 or less after refraction. Field of vision 20 degrees or less
Iowa School for the Blind	20|200
Kansas State School for the Blind	"Those whose vision prevents them from doing satisfactory work in public schools"
Kentucky School for the Blind	"Children who because of visual handicap are unable to attend public school"
Louisiana School for Blind	20 per cent or less
Louisiana State School for Negro Blind	20|200
Maryland School for the Blind (White and Negro)	Vision less than 20|200 in each eye
Perkins Institution and Massachusetts School for the Blind	Not more than one-tenth of normal vision in either eye[4]
Michigan School for the Blind	Central vision of 20|200 or less in the better eye after correction, or better central vision but limitation of peripheral vision
Minnesota Braille and Sight-Saving School	20|200[5]
Mississippi School for the Blind	"Too visually handicapped to carry on in public school"
Piney Woods School, Dept. for the Blind	20|200
Missouri School for the Blind	20|200 after correction
Montana School for the Deaf and Blind	"Too blind to make satisfactory progress in the public schools"

Nebraska School for the Blind	"Inability through defective vision to obtain an education in the common schools"
New Mexico School for the Blind	20|200, subject to variation as considered by ophthalmologists to be in child's best interest
New York - Lavelle School for the Blind	20|200 or less with correction or a sufficient limitation of field to constitute blindness
New York Institute for the Education of the Blind	"Not more than 20|200 visual acuity in the better eye, and for whom a diagnosis and medical findings show that vision cannot
New York State School for the Blind	20|200 visual acuity in the better eye with correction
North Carolina State School for the Blind and the Deaf	20|200 or less vision
North Dakota State School for the Blind	"Children whose sight is so defective that they cannot attend the public schools with profit"
Ohio State School for the Blind	Less than 20|200 in the better eye
Oklahoma School for the Blind	20|200 or less by Snellen Notation
Oklahoma Institute for Deaf, Blind, and Orphan Negroes	"All who cannot see to read ordinary print"
Oregon State School for the Blind	Less than 20|200 in stationary eye conditions, progressively eye conditions, and lack of central vision[6]
Pennsylvania Institution for the Instruction of the Blind	Upper limit of vision of 10 per cent in the better eye, or a progressive condition which will soon bring the visual acuity within the prescribed limitation, or borderline cases where no sight-saving facilities are available.
Royer Greaves School for Blind	"Defective vision"
Western Pennsylvania School for the Blind	Visual acuity of 20|200 and less
Puerto-Rico Instituto Puertorriqueno de Nino Ciegos	10 per cent or less vision
South Carolina School for the Deaf and the Blind (White Dept.)	No definition. Left to discretion of examining ophthalmologist and superintendent
South Carolina School for the Deaf and the Blind (Colored Dept.)	No definition. Child must be recommended by examining ophthalmologists and approved by school ophthalmologist and superintendent

South Dakota School for the Blind	20|180
Tennessee School for the Blind (White and Negro)	"Pupils have less than 20 per cent vision in most cases"
Texas School for the Blind	20|200
Texas Deaf, Dumb and Blind Institute for Colored Youths	"Impaired vision or total blindness"
Utah School for the Blind	20|200 or worse in best eye. Ability to recognize sight-saving (¼ inch) type at distances of more than 3 inches
Virginia School for the Deaf and the Blind	Visual acuity of 20|200 after correction
Virginia State School for Colored Deaf and Blind Children	No provision
Washington State School for the Blind	Less than 20|200 vision in the better eye
West Virginia Schools for the Deaf and Blind	"Insufficient sight to pursue work in the regular public schools"
Wisconsin School for the Blind	20|200 vision or less

FOOTNOTES FOR TABLE Ib

(1) "Determined by school specialist"
(2) Each case is individually considered and the definition given is not rigidly adhered to.
(3) If a child has no vision in one eye but normal vision in the other, public school is recommended.
(4) Alternative definition—"Unless admitted by special arrangement, they shall be either blind or of such defective eyesight as to be unable to read and use ordinary printed type one-eighth of an inch square."
(5) "Although 20/200 is theoretically the top, we have braille students with 20/70 vision."
(6) General definition—"Inability to do public school work because of a visual handicap."

TABLE IIa. OPHTHALMOLOGICAL SERVICE AVAILABLE

Total Number of Schools Reporting		54
Physician employed for eye care	Yes	47
	No	7
Qualifications of physician for eye care		
Certificated by American Board of Ophthalmic Examiners	18	
Practice confined to eye diseases, but not certificated	3	
Eye, ear, nose and throat specialists	17	
No specialty	4	
Not reported	5	
	47	

AMERICAN ASSOCIATION of INSTRUCTORS of the BLIND
STUDY OF MEDICAL EYE CARE IN SCHOOLS FOR THE BLIND–1942

TABLE IIb. OPHTHALMOLOGICAL SERVICE AVAILABLE

Name of School	Ophthalmologist Employed	Time Given	Paid	How Paid	Amount Paid	Certificated? (1)
Alabama School for the Blind	Yes	When needed	Yes	Monthly Salary	$50 per month	OALR
Alabama School for Negro Deaf and Blind	Yes	When needed	N. R.	N. R.	N. R.	OALR
Arizona State School for the Deaf and the Blind	Yes	2 to 4 hours per week	Yes	Annual Salary	N. R.	Oph.
Arkansas School for the Blind (White and Negro)	Yes	When needed	Yes	Monthly Salary	N. R.	Cert.
California School for the Blind	Yes	2 hrs. a wk.	Yes	Salary	N. R.	OALR
Colorado School for the Deaf and Blind	Yes	N. R.	Yes	Fees	N. R.	Cert.
Connecticut Institute for the Blind	Yes	Available as required by appt.	No	———	———	Cert.
Florida School for the Deaf and the Blind (White and Negro)	Yes	Calls twice a week	Yes	Annual Salary	$810	OALR
Georgia Academy for the Blind	No	———	———	———	———	———
Hawaii—Territorial School for Deaf and Blind	Yes	As needed	Yes	Annual Salary	$600	N. R.
Idaho School for Deaf and Blind	Yes	Occasional Appointments	Yes	Fees	N. R.	No specialty

Name of School	Ophthalmologist Employed	Time Given	Paid	How Paid	Amount Paid	Certificated? (1)
Illinois School for the Blind	Yes	Half day per week	Yes	Annual Salary	$600	OALR
Indiana School for Blind	No	Part-time volunteer "a few visits each year"	———	———	———	———
Iowa School for the Blind	Yes	(2)	Yes	Fees	$100 per yr.	Cert.
Kansas State School for the Blind	Yes	N. R.	Yes	Salary	$65 per month	———
Kentucky School for the Blind	Yes	When needed	No	———	———	No specialty
Louisiana School for Blind	Yes	On call	Yes	Annual Salary	N. R.	No specialty
Louisiana State School for Negro Blind	Yes	N. R.	Yes	N. R.	N. R.	———
Maryland School for the Blind (White and Negro)	Yes	Subject to call	Yes	Fees	N. R.	Oph.
Perkins Institution and Massachusetts School for the Blind	Yes	1.5 hours per week	Yes	Annual Salary	$300	Cert.
Michigan School for the Blind	Yes	1.5 hours per week	Yes	Annual Salary	$500	OALR
Minnesota Braille and Sight-Saving School	Yes	1 day per month	Yes	Annual Salary	$240	OALR
Mississippi School for the Blind	Yes	Only when called	No (3)	(3)	(3)	OALR
Piney Woods School, Department for the Blind	Yes	In cases of special need	Yes	Fee	N. R.	OALR

Name of School	Ophthalmologist Employed	Time Given	Paid	How Paid	Amount Paid	Certificated? (1)
Missouri School for the Blind	Yes	When needed	Yes	Fee	$3.00 per exam	Cert.
Montana School for the Deaf and Blind	Yes	As needed	Yes	[4]	$50 per yr.	OALR
Nebraska School for the Blind	No	———	———	———	———	———
New Mexico School for the Blind	Yes	Indefinite	Yes	N. R.	N. R.	Cert.
New York—Lavelle School for the Blind	Yes	As required	No	———	———	Oph.
New York Institute for the Education of the Blind	Yes	Monthly visits and office calls as needed	Yes	Annual Salary	N. R.	Cert.
New York State School for the Blind	Yes	As needed	Yes	Monthly Salary	$25 per month	No specialty
North Carolina State School for the Blind and the Deaf	Yes	As needed	Yes	Annual Salary	$900[5]	Cert.
North Dakota State School for the Blind	No	———	———	———	———	OALR
Ohio State School for the Blind	Yes	All pupils examined yearly	Yes	Monthly Salary	$75	Cert.
Oklahoma School for the Blind	Yes	Twice a week	Yes	Monthly Salary	$75	OALR
Oklahoma Institute for Deaf, Blind and Orphan Negroes	No	———	———	———	———	———
Oregon State School for the Blind	Yes	Half day per week	Yes	Monthly Salary	$25	Cert.

Name of School	Ophthalmologist Employed	Time Given	Paid	How Paid	Amount Paid	Certificated? (1)
Pennsylvania Institution for the Instruction of the Blind	Yes	1 day per week	Yes	Annual Salary	$100 per yr.	Cert.
Royer Greaves School for Blind	Yes	As needed	No	———	———	Cert.
Western Pennsylvania School for the Blind	Yes	As needed	No	———	———	N. R.
Puerto Rico—Instituto Puertorriqueno de Ninos Ciegos	Yes	2 Hours per wk.	Yes	Annual Salary	$1500 per year	OALR
South Carolina School for the Deaf and Blind (White Department)	Yes	Half day per week and on call	Yes	Monthly Salary	$50	Cert.
South Carolina School for the Deaf and Blind (Colored Department)	Yes	(Included in White Dept.)	Yes	Included in White School	———	Cert.
South Dakota School for the Blind	No	———	———	———	———	———
Tennessee School for the Blind (White and Negro)	Yes	As needed	Yes	Annual Salary	$425	OALR
Texas School for the Blind	Yes	3 hours per week	Yes	Monthly Salary	$140	Cert.
Texas Deaf, Dumb and Blind Institute for Colored Youths	Yes	As needed	Yes	Salary	N. R.	OALR
Utah School for the Blind	Yes	As needed	Yes	Annual Salary	$400	OALR
Virginia School for the Deaf and the Blind	No	(6)	———	———	———	———
Virginia State School for Colored Deaf and Blind Children	Yes	N. R.	Yes	Fee basis	N. R.	Cert.

Name of School	Ophthalmologist Employed	Time Given	Paid	How Paid	Amount Paid	Certificated? (1)
Washington State School for the Blind	Yes	N. R.	Yes	Annual Salary	$360	N. R.
West Virginia Schools for the Deaf and the Blind	Yes	6 days or more per yr.	Yes	Annual Salary	$450	OALR
West Virginia Schools for Colored Deaf and Blind	Yes	As needed	Yes	Fee basis	N. R.	OALR
Wisconsin School for the Blind	Yes	Twice a week	Yes	Monthly Salary	$100 per month (7)	Cert.

FOOTNOTES FOR TABLE IIb

(1) "Cert." means "Certificated by the American Board of Ophthalmic Examiners.
"OALR" means "Certificated by the American Board of Oto-Laryngology".
"Oph." means "Practice confined to diseases of the eye".
(Information taken from the American Medical Association Directory).
(2) "Examines all students twice a year and supervises detailed care when cases are sent to the University Hospital".
(3) "Not paid as a rule; when paid, payment is on a fee basis and very little".
(4) Fee includes services of entire clinic.
(5) Payment covers eye, ear, nose, and throat care.
(6) Utilizes services of university eye clinic on a fee basis.
(7) Covers complete medical services except dentistry.

AMERICAN ASSOCIATION of INSTRUCTORS of the BLIND STUDY OF MEDICAL EYE CARE IN SCHOOLS FOR THE BLIND–1942

TABLE IIIa. PROVISION FOR EYE EXAMINATIONS

Total Number of Schools Reporting			54
Eye examination required before admission		Yes	41
		No	13
Pre-admission examination made by			
Eye physician	19		
General physician	15		
Eye physician or general physician	4		
Local Health Unit	1		
Examiner not reported	2		
	41		
Eye examination made during first year after admission		Yes	50
		No	4
Frequency of re-examination of eyes			
Annually or oftener	22		
"When needed"	27		
Frequency not reported	5		
	54		
Standard Form "Physician's Report of Eye Examination" Used		Yes	36
		No	14
		Not reported	4

AMERICAN ASSOCIATION of INSTRUCTORS of the BLIND
STUDY OF MEDICAL EYE CARE IN SCHOOLS FOR THE BLIND–1942

TABLE IIIb. PROVISION FOR EYE EXAMINATIONS

Name of School	Eye Exam. Required Before Admission	Pre-Admission Eye Exam. Made By	Eye Exam. in 1st Year	1st Eye Exam. When Made	Frequency of Re-Exam.	Is Phys. Report Form Used
Alabama School for the Blind	No	_____	Yes	As soon as possible	Annually	Yes
Alabama School for Negro Deaf and Blind	No	_____	Yes	Few weeks after admission	Annually	Yes
Arizona State School for the Deaf and the Blind	Yes	Family physician or county or school doctor	Yes	Within few weeks	When doctor or school advises	N. R.
Arkansas School for the Blind (White and Negro)	No	_____	Yes	Within 10 days	When necessary	No
California School for the Blind	Yes	Qualified local M. D.	Yes	Immediately	Annually or oftener	Yes
Colorado School for the Deaf and Blind	No	_____	Yes	2nd or 3rd week	When doctor recommends	No
Connecticut Institute for the Blind	Yes	Local ophthalmologist	Yes	As appointments permit	On doctor's recommendation	No
Florida School for the Deaf and the Blind (White and Negro)	Yes	Eye specialist	Yes	Immediately	Twice a year	Yes
Georgia Academy for the Blind	Yes	Licensed local physician	No	_____	When needed	No

Name of School	Eye Exam. Required Before Admission	Pre-Admission Eye Exam. Made By	Eye Exam. in 1st Year	1st Eye Exam. When Made	Frequency of Re-Exam.	Is Phys. Report Form Used
Hawaii—Territorial School for Deaf and Blind	Yes	N. R.	Yes	1st week	Annually	No
Idaho School for Deaf and Blind	Yes	An ophthalmologist	Yes	1st month	As needed	Yes
Illinois School for the Blind	Yes	Pupil's ophthalmologist approved by school ophthalmologist	Yes	As soon as possible	Annually	Yes
Indiana School for Blind	Yes	Any licensed physician spec. in treatment of eyes	Yes	Any time	On adice of school physician	Yes
Iowa School for the Blind	Yes	Local ophthalmologist	Yes	60 days	Every 6 months	Yes
Kansas State School for the Blind	Yes	Any ophthalmologist	Yes	Immediately	Annually - oftener if needed	Yes
Kentucky School for the Blind	No	———	Yes	As soon as possible	Only on special recommendation of ophthalmologists	No
Louisiana School for Blind	Yes	Local health unit	Yes	Within 9 months	As needed	Yes
Louisiana State School for Negro Blind	No	———	Yes	Middle of term	When eyes give trouble	Yes

Name of School	Eye Exam. Required Before Admission	Eye Exam. in 1st Year Made By	Eye Exam. in 1st Year	1st Eye Exam. When Made	Frequency of Re-Exam.	Is Phys. Report Form Used
Maryland School for the Blind (White and Negro)	Yes	School ophthalmologist	Yes	Within few weeks	As recommended by school oph.	Yes
Perkins Institution and Massachusetts School for the Blind	Yes	Pupil's ophthalmologist or physician	Yes	Two weeks	Every year or two	Yes
Michigan School for the Blind	Yes	Local ophthalmologist	Yes	1 to 2 weeks	Annually or oftener	Yes
Minnesota Braille and Sight-Saving School	Yes	Local physician or ophthalmologist	Yes	1st month	Annually	Yes
Mississippi School for the Blind	Yes	Family physician	Yes	1st month	Only when required	Yes
Piney Woods School, Department for the Blind	Yes	Local physician	Yes	Within 9 months	Seldom unless special need	Yes
Missouri School for the Blind	Yes	Family physician	Yes	Within 1 month	Annually	No
Montana School for the Deaf and Blind	No	————	Yes	Within 6 weeks	Annually or oftener	Yes
Nebraska School for the Blind	Yes	Local physician	Yes	Within 1 month	As supt. feels it is needed	N. R.
New Mexico School for the Blind	Yes	State ophthalmologist or his associates	Yes	As soon as possible	N. R.[1]	Yes

Name of School	Eye Exam. Required Before Admission	Pre-Admission Eye Exam. Made By	Eye Exam. in 1st Year	1st Eye Exam. When Made	Frequency of Re-Exam.	Is Phys. Report Form Used
New York—Lavelle School for the Blind	Yes	Family ophthalmologist or clinic	Yes	N. R.	Annually	Yes
New York Institute for the Education of the Blind	Yes	School ophthalmologist	Yes	Before admission	Totally blind annually; others on rec. of ophth.	Yes
New York State School for the Blind	Yes	Local ophthalmologist	Yes	As soon as possible - 2 weeks	As recommended by ophth.	Yes
North Carolina State School for the Blind and the Deaf	Yes	Local physician	Yes	1st month	Annually or oftener	Yes
North Dakota State School for the Blind	Yes	Local oph. or physician	Yes by school phy.	Within 1st week	N. R.	Yes
Ohio State School for the Blind	Yes	School ophthalmologist	Yes	Upon admission	Annually	Yes
Oklahoma School for the Blind	Yes	N. R.	Yes	On admission	When condition suggests	Yes
Oklahoma Institute for Deaf, Blind and Orphan Negroes	Yes	———	No	———	N. R.	N. R.
Oregon State School for the Blind	No	———	Yes	Within 1 month	Annually or oftener	Yes
Pennsylvania Institution for the Instruction of the Blind	No	Local ophthalmologist	Yes	Within 2 weeks	Annually or oftener	No

Name of School	Eye Exam. Required Before Admission	Pre-Admission Eye Exam. Made By	Eye Exam. in 1st Year	1st Eye Exam. When Made	Frequency of Re-Exam.	Is Phys. Report Form Used
Royer Greaves School for Blind	No	———	Yes, if sight remains	Depends on condition of child	Every 6 months	Yes
Western Pennsylvania School for the Blind	Yes	School ophthalmologist	Yes	Immediately	Only on spec. rec.	No
Puerto Rico—Instituto Puertorriqueno de Ninos Ciegos	Yes	Local ophthalmologist	Yes	Within 6 months	Annually	No
South Carolina School for the Deaf and Blind (White Department)	Yes	Local ophthalmologist	Yes	Within 1 month	Only when ogist recommends	Yes
South Carolina School for the Deaf and Blind (Colored Department)	Yes	Local ophthalmologist	Yes	Within 3 months	Only when school staff request	Yes
South Dakota School for the Blind	Yes	Local ophthalmologist	No	———	N. R.	No
Tennessee School for the Blind (White and Negro)	Yes	Family physician	Yes	As soon as possible	When nurse and supt. think necess.	Yes
Texas School for the Blind	Yes	Local physician	Yes	Immediately	Annually	Yes
Texas Deaf, Dumb and Blind Institute for Colored Youths	Yes	Local physician	Yes	Immediately	As often as oph. rec.	No
Utah School for the Blind	No	———	Yes	Within 2 weeks	When indicated	Yes
Virginia School for the Deaf and the Blind	No.	———	No[2]	Within 2 years	N. R.	Yes

Name of School	Eye Exam. Required Before Admission	Pre-Admission Eye Exam. Made By	Eye Exam. in 1st Year	1st Eye Exam. When Made	Frequency of Re-Exam.	Is Phys. Report Form Used
Virginia State School for Colored Deaf and Blind Children	No	———	Yes	Within 3 months	Annually	N. R.
Washington State School for the Blind	Yes when possible	Local physician	Yes	As soon as possible	When necessary	Yes
West Virginia Schools for the Deaf and the Blind	Yes	Local physician	Yes	Within 60 days	Some annually, others less	Yes
West Virginia Schools for Colored Deaf and Blind	Yes	Local physician	Yes	Withinn 10 days	Annually or oftener	No
Wisconsin School for the Blind	Yes	Local oph. or physician	Yes	Upon admission or soon after	Whenever necessary	No

FOOTNOTES FOR TABLE IIIb.

(1) "Plan being revised. Hope to examine three times during school year."
(2) "Medical service is not available so that this practice could be put into effect."

AMERICAN ASSOCIATION of INSTRUCTORS of the BLIND STUDY OF MEDICAL EYE CARE IN SCHOOLS FOR THE BLIND–1942

TABLE IVa. PROCEDURE FOLLOWED FOR APPLICANTS WHOSE VISION DOES NOT COME WITHIN THE DEFINITION OF BLINDNESS

Total Number of Schools Reporting	**54**
Admission refused	27(1)
Student regularly enrolled	8
Student admitted on trial	2
Student enrolled in sight-saving class within the school	8(2)
Procedure indefinitely reported or not reported	9

(1) One school admits only county pupils; city pupils are referred to sight-saving classes in public schools. Two schools admit only progressive cases. One school admits only if no sight-saving class available.

(2) One school admits only for Grades 1 through 6.

AMERICAN ASSOCIATION of INSTRUCTORS of the BLIND STUDY OF MEDICAL EYE CARE IN SCHOOLS FOR THE BLIND–1942

TABLE IVb. PROCEDURE FOR STUDENTS WITH VISION OUTSIDE DEFINITION

Name of School	Procedure
Alabama School for the Blind	Return to type school
Alabama School for Negro Deaf and Blind	None
Arizona State School for the Deaf and Blind	(1)
Arkansas School for the Blind (White and Negro)	Recommend public school
California School for the Blind	Admit them
Colorado School for Deaf and Blind	Refer to sight-saving classes
Connecticut Institute for the Blind	Refer to Board of Education of Blind
Florida School for the Deaf and Blind (White and Negro)	Return to pubilc school or sight-saving classes
Georgia Academy for the Blind	N. R.
Hawaii - Territorial School for Deaf and Blind	Refer to Bureau of Sight Conservation
Idaho School for Deaf and Blind	Taken on trial; often referred to public school
Illinois School for the Blind	Recommended for sight-saving classes
Indiana School for the Blind	Do not accept
Iowa School for the Blind	Admitted on trial until school ophthalmologist makes recommendations
Kansas State School for the Blind	Refuse admittance
Kentucky School for the Blind	Send home and urge regular school
Louisiana School for the Blind	Refer to day-school Supt. for sight-saving books
Louisiana State School for Negro Blind	Discharged with recommendation
Maryland School for the Blind (White and Negro)	City pupils referred to sight-saving; County pupils enrolled
Perkins Institution and Massachusetts School for the Blind	Retained if progressive condition; others referred to public school

(1) "Their School Progress — Advice of school doctors for applicants. Our own analysis after child enters school.

Michigan School for the Blind	Sight-saving class within school for Grades 1 through 6
Minnesota Braille and Sight-Saving School	Assigned to sight-saving class in school. If vision too great, discharged
Mississippi School for the Blind	Usually refuse to admit them
Piney Woods School, Department for the Blind	Referred to State Rehabilitation Department
Missouri School for the Blind	Refer to other agencies
Montana School for the Deaf and Blind	Enroll in sight-saving department or return to public school
Nebraska School for the Blind	Advise
New Mexico School for the Blind	Plan to develop sight-saving work
New York - Lavelle School for the Blind	Referred by social worker to sight-saving
New York Institute for the Education of the Blind	Referred to sight-saving department of public school
New York State School for the Blind	Refer to sight-saving class in public school; if not available, accept
North Carolina State School for the Blind and the Deaf	Return them to seeing schools
North Dakota State School for the Blind	Refuse admission
Ohio State School for the Blind	Refuse admission except to high school pupils for vocational training
Oklahoma School for the Blind	If not progressive condition, not admitted
Oklahoma Institute for Deaf, Blind and Orphan Negroes	Not admitted
Oregon State School for the Blind	Pupils admitted to sight-saving class within the school; after period of adjustment, those who can carry on in public school are returned to their home schools
Pennsylvania Institution for the Instruction of the Blind	Referred to home community sight-saving class if available
Royer Greaves School for Blind	If reading will not injure eyes, teach ink print
Western Pennsylvania School for the Blind	Refer to public school
Puerto Rico - Instituto Puertorriqueno de Ninos Ciegos	Refuse admission
South Carolina School for the Deaf and Blind (White Department)	Admit

South Carolina School for the Deaf and Blind (Colored Department)	N. R.
South Dakota School for the Blind	Not reported
Tennessee School for the Blind (White and Negro)	Refer to sight-saving department within school
Texas School for the Blind	Dismissal
Texas Deaf, Dumb and Blind Institute for Colored Youths	N. R.
Utah School for the Blind	Refer to public school in hope of special instruction
Virginia School for the Deaf and Blind	Refer to sight-saving classes within school
Virginia State School for Colored Deaf and Blind Children	Admit those who cannot remain in public school
Washington State School for the Blind	Referred to sight-saving class within school
West Virginia Schools of the Deaf and Blind	Few retained in school; others referred to public school
West Virginia Schools for Colored Deaf and Blind	Recommendation of school ophthalmologist
Wisconsin School for the Blind	Refer to sight-saving classes within school

REPORT OF THE COMMITTEE ON ENGLISH BLIND REFUGEE CHILDREN

Following the Pittsburgh Convention in 1940, the President of the Association was asked to appoint a committee to co-operate with the American Foundation for the Blind for the placing of refugee blind children in schools for the blind in this country, should such a request come from the English authorities. President Woolston appointed the undersigned chairman with Mr. John F. Bledsoe and Mr. Robert Lambert members of the committee.

As reported in 1942, this committee has never met because the problem for which they were appointed has not arisen. In so far as we know, there has been no request for our co-operation, either from the English authorities or from the American Foundation for the Blind, for the placement of blind refugee children.

In view of the fact that this problem is not likely to arise, we recommend that this brief report be accepted and the committee discharged.

Respectfully submitted,
Gabriel Farrell, Chairman

Sectional Meetings, Tuesday A. M.

JOHN W. HAYNES—Chairman
Principal, Alabama School for the Blind

MRS. EMMIE F. WILLIAMS—Sub-chairman, "Primary Teachers"
Alabama School for the Blind

The Child of Low Intelligence—What Can Be Done For Him

TENNIE M. LEE
Oklahoma School for the Blind

One phase or another of this subject, such as "The Backward Child", "The Borderline Child", "The Inferior Child", and "The Slow Learner", has been written about and discussed for many years; yet the subject is still as difficult to handle and bring to a satisfactory conclusion as the child of low intelligence is difficult to teach and bring to a useful position in society.

To state a problem is not to solve it, and I am afraid the solution to this one will involve much more than speeches.

[1]"Intelligence is the aggregate or global capacity of the individual to act purposefully, to think rationally, and to deal effectively with his environment.

"It is global because it characterizes the individual as a whole. It is aggregate because it is composed of elements or elements or abilities, which, though entirely independent, are qualitatively differentiable."

But intelligence is not identical with the mere sum of these abilities, however inclusive, any more than the effects of electricity are identical with the stuff that produces them.

We do not know the ultimate nature of this energy called intelligence any more than we know what electrical energy is. We know it only by the things it does, or better, by the things it enables us to do.

From ancient days, there has been a recognition of differences in intellectual abilities. Quintilian, born in the year 35 A.D., made the following observations: "It is generally, and not without reason, regarded as an excellent quality in a master to observe differences of ability in those whom he has undertaken to instruct, and to ascertain in what direction the nature of each particularly inclines him; for there is in talent an incredible variety; and the forms of mind are not less varied than those of bodies."

Earliest classification of intelligence were scarcely more, however, than practical attempts to define various patterns of behavior in medical-legal terms.

These terms, like idiot, imbecile, and moron, used by early day writers on the subject, still form part of our present-day terminology.

Now-a-days, a mental defective is defined, not merely as "a person who, through congenital arrest or imperfect mental development, is incapable of managing himself or his affairs with ordinary prudence; but as one who, on standardized tests, fails to attain an I.Q. or an M.A. of a particular level."

The I.Q. (intelligence quotient) has become the basis for establishing a dividing line between normality and all the various grades of sub-normality; and there is a strong tendency to attach a stigma to pupils scoring low in so-called intelligence tests.

In fact Terman, on introducing the Stanford Revised Test in 1916, said flatly that all persons testing below 70 I.Q. should be considered feebleminded.

(1) David Wechsler, "The Measurement of Adult Intelligence" (1941) Williams and Wilkins Company, Baltimore.

How many children, and adults, over the past quarter century have landed in feebleminded institutions on the basis of a single I.Q. rating in the 60's, without regard to the fact that many another of like rating was able to lead a free and useful life!

That the percentage of feeblemindedness is greater among the blind seems to be recognized by most investigators—percentages ranging from 5 to 20. This wide range is probably due to the difficult conceptions of feeblemindedness and to the fact that some causes of blindness also cause mental defects.

The standard ratings given by testers is shown by the following table:

Genius 140 and above	
Very Superior	120 - 140
Superior	110 - 120
Normal	90 - 110
Dull	80 - 90
Borderline	70 - 80
Feebleminded	0 - 70

[1]Recently, some investigators have stated that "only children testing near I.Q. 180 may prove to justify the label "genius" or "near genius". Many children with I.Q.'s 140 or above are indeed mediocre. Their abilities just happen to parallel those required in simple mental tests.

The tests should measure **inate intellectual capacity** rather than **acquired intellectual ability.**

[2]"At present, awaiting an authenticated physiological or anatomical method of measuring intelligence, we are forced to **infer** innate capacity from acquired ability."

[3]A few years ago the Committee on Physically and Mentally Handicapped Children of Hoover's "White House Conference on Child Health and Protection" attempted to arrive at some agreement in the use of terms. They conceived of the mentally deficient as comprising two groups: the feebleminded who are deficient and also socially inadequate, and the intellectual sub-normals who are deficient but who are not necessarily socially inadequate.

Here are the statements agreed upon by the committee:

1. Intelligence tests should not be used as a sole means of identifying high-grade feeblemindedness or intellectual subnormality. Careful clinic methods should be used in diagnosis.

2. The use of the term moron to denote persons between 60 and 85 I.Q. in whom nothing more than simple intellectual subnormality has been demonstrated, be discontinued.

3. The term "borderline" should neither denote nor connote feeblemindedness, as above defined, but should have the meaning of "doubtful" only.

4. Only a fraction (about 1|13) of those within the 60 to 85 I.Q. range have been demonstrated to be feebleminded as the term is used in standard definitions.

5. Favorable situational conditions play some part in preventing marked social failure of the mentally deficient, even when unfavorable constitutional criteria are present.

"Favorable situational conditions"! The schools must supply these even though many of the homes have not.

Every child is entitled to an education within the limits of his capacity, and all who are trainable, with any handicap whatever, should have their chance.

In schools all over the country, very little help was given to the mentally slow pupil until the beginning of this century. Now it is realized by all educators that such pupils should be given special guidance and encouraged to get the most out of their schooling. The problem is to draw the line between the educable and the non-educable.

In a sense, not even the feeble minded child is non-educable. He can always

(1) and (3) George D. Stoddard, "The Meaning of Intelligence", The Macmillan Company (1943), New York.
(2) Herbert S. Conrad, "The Journal of Social Psychology".

be taught or trained to some extent; but those (blind or seeing) whose I.Q.'s are below 50 are recommended for institutions for the feebleminded.

To earn a living is often easier than to pass school subjects, and they say, to vote "right" is easier.

A mentally retarded boy may never become a superintendent or a "boss" of any kind; he isn't going to shine in any profession nor a job which calls for abstract thinking; but, if given half a chance in school, there is ample opportunity for useful happy lives concerned with tasks for which he is, in fact, better adapted than the individual of high intelligence. Even at the upper feebleminded levels, persons get along all right vocationally; unless, of course, there are serious physical handicaps.

Usually the mentally retarded child is good at doing things with his hands. Often he may have a special talent or skill. There is the story of the boy who failed utterly in school subjects, but who developed into a skilful cartoonist and attained a position no one would have predicted for him in the fourth grade. The great Edison, you remember, was dismissed from school by a teacher who thought he was a dullard; and there are others who have suffered from maladjustments in school.

For many boys and girls, the first step in solving their problems is the warm interest of some one who sees them, not as mere obstructions—as snags in the smooth-flowing stream of academic progress, but as individuals possessed with points of view and potentialities of their own.

The factors of personality are the powers that determine the nature of adjustments in the environment; but none of us is always completely adjusted to his environment, because, for one thing, no environment is completely static.

Lacking personal adjustment, the teacher's unstable personality will affect the adjustment and behavior of her pupils; and maladjustments in personality and behavior affect progress. "As the teacher, so the school" is still a truism.

The responsibility for failure should not always be placed on the pupil. As teachers, let us ask ourselves, "Have I done all that could have been done? What more can be done for this child of low intelligence?"

A well-known educator of the blind once remarked, "A periennially difficult problem—what to do with some homeless child who will not classify or fit in."

A California superintendent told his teachers, a generation ago, "There are no misfit children. There are misfit schools, misfit texts and studies, misfit dogmas; but each child is a special creation, and, strictly speaking, education cannot be the same for any two pupils."

A New York Man says, "Child training is a retail job rather than a wholesale one. It is the individual who is most important."

To make the schools fit the child, calls for reforms in administration and curriculum, and the supplying of new interests and enrichment within the curriculum.

Most educators, in schools for the seeing as well as schools for the blind seem to be agreed upon one thing: that children of inferior intelligence should be eliminated from regular school classes; and recommend that they be taught in segregated groups.

Except for the socially inadequate feebleminded, I am not convinced that segregation is the answer to the problem.

We have said that maladjustments in personality and behavior affect progress. Can a child make proper adjustment in personality if he is segregated? Is it a "favorable situation condition" if a mentally weak child is grouped with only those who are mentally weak? Does a dull knife become sharp by putting it away in a drawer?

The most striking adjustment any individual ever has to make takes place at

the moment of his birth when he becomes a member of his first social group, the family.

As the child matures, less is done for him and more is expected of him. Other children, even adults, oppose their wills to his. In this opposition of wills, adjustments in behavior have to be made and so personality is developed. Whether of inferior intellect or superior, the child learns from the other members of the group who are of different ages and mental abilities.

Entrance into school, perhaps away from home, is entrance into another and wider social group. The chief aim here should be to help the child to re-act to situations which he will meet both in and out of school and to establish habits and attitudes which will continue to operate as life goes on. There must be some inter-play between the child and his environment.

When he steps out into the world to earn his living, he becomes a part of the largest social group. He will not be segregated. He is now a citizen. Has he been trained in citizenship? If he has worked and studied and played with children of all levels of intelligence, he will know how to re-act to the demands or requirements of citizenship.

Why, then, should children be segregated in school from the social forces which are so significant in the moulding of his personality and character?

[1]"No person whether normal or handicapped can develop a socially desirable personality through his own efforts. The training of the handicapped and the education of the members of his environment must take place simultaneously."

Therefore, I think we should look well into this matter of grouping children "homogeneously" in terms of I.Q. ratings.

[2]"If she understands child behavior and has access to test, clinic, and cultural data concerning her pupils, together with provisions for flexibility and enrichment within the curriculum, the grade school teacher is well equipped to provide for large individual differences—perhaps for all but the extremes of distribution.

In common with all children, the mentally superior child possesses some unevenness in his abilities. There is a distribution of talent at all levels. Every child deviates from all others, so radically sometimes, as to be only superficially classified by a grade designation; but the program can be varied and challenging enough to care for the diverse needs of the various members of a given grade, so that the superior child need not suffer because of his association with the child of low intelligence.

The intellectual range of the bright child makes it desirable to give him wide freedom and highly set goals in various cultural areas. He can thus raise his own standards from piece-meal learning to mastery of his subjects. Also, he can make constructive use of his powers by helping a slower child.

There is some truth in the recent criticism by a newspaper columnist that "American schools have broken down in scholarship and discipline"; that "the student knows less and less about more and more things, fails to develop intellectual humility so necessary to learning, and feels certain he already possesses all the answers."

[3]Another interesting fact was found in an article entitled, "B-1 for Brain Power". After many tests and experiments with results always the same, Dr. Ruth Flinn Harrell, of Teacher's College, states, "When yeast was added to the diet, there resulted a pronounced improvement in learning ability."

In view of that statement, I would suggest that the first thing to do about the child of low intelligence is to widen his

(1) Pintner, Eisenson, Stanton, "The Psychology of the Physically Handicapped", F. S. Crofts & Co. (1941) New York.
(2) George D. Stoddard, "The Meaning of Intelligence", The Macmillan Co. (1943) New York.
(3) Robert Rouda, "B-1 for Brain Power", READ Magazine, May 1944.

diet to include sufficient food containing vitamin B-1.

To make learning available to him, every bit of subject matter must be presented to him concretely and through as many senses as possible. He learns better through the hand than through the head.

Normal standards will be more nearly attained in hand-skills and in the physical and social development classes. Activities contribute much to learning. They can be used to learn in practice what can never be learned from books alone.

As a part of his social development, he must learn obedience, kindness, politeness, cheerfulness, helpfulness, how to conduct himself in an orderly manner, non-abuse of books, equipment, school facilities, and time; how to contribute his part of a program or conversation, and how to enjoy the contribution of others.

Lessons learned with a laugh are seldom forgotten. Humor, not only sustains interest, but supplies the relaxation necessary when mental fatigue starts. More than that, we can laugh only at things we understand—no one laughs when he doesn't get the point.

To the blind child, as to the seeing, art is an instrument of learning and growth, because it is a means of self-expression. Everyone is, to some extent an artist.

Spend time explaining and demonstrating equipment, lessons, and assignments. Show him how to open a new book correctly; explain about the fly-leaf, the contents page and how to use it. Demonstrations spur him on to imitation and, in the joy of aroused interest, a learning situation arises which gives the pupil that feeling of success and self-confidence so necessary to his mental well-being.

All should be given, in so far as his ability will allow, a practical working knowledge of the tool subjects—reading, arithmetic, and English, including writing and spelling. In the spelling classes much drill on phonics and syllables should be provided. Most defects, as discovered by the Army and Navy training programs, stem from weakness in vocabulary and no understanding whatever of the syllabic composition of words.

For the child having difficulty in learning to read, or the one slow in arithmetic or writing, I would suggest private lessons with a special teacher—an arrangement similar to the present one in most residential schools for the blind, for music, shop, and sewing classes. This should not conflict with his classes in the subject with his regular teacher.

After many years of trying to plane and saw and hammer the child to fit the school, perhaps, at last, the school will come to recognize and develop talents in terms of what the child can do and what the country has to have.

Some secondary schools have already adopted this plan, but there are too many elementary schools that are still "factories" turning out "standard products", with teachers who are "machine operators".

So far as I know there is no "royal road to success" in the teaching of any child, whatever his level of intelligence.

1"We are told that a hundred years from now, man will live to be 125 years old, his normal height will be 6 ft. 3 in., he will never become fat, never grow gray—his physique and health will be perfect—all this made possible by science."

Let us hope that while science is making the world a better place in which to live, and man himself a better creature, that somehow or other science will see to it that there are no handicapped or mentally sub-normal children.

(1) Edwin Baird, "Man a Hundred Years from Now", READ Magazine, May 1944.

THE VALUE OF PROJECTS TO MOTIVATE INTEREST

MRS. EMMIE F. WILLIAMS
Alabama School for the Blind

First I want to explain to my "fellow-sufferers" that this paper was forced on me at the last minute, due to the fact that Mrs. McCaskey of the Virginia School for the Blind, who so kindly agreed to write it, was unable to come.

This subject is one of my pet hobbies, so I am going to give you a special privilege in case I fail to realize when the time comes for me to stop! I am like the man who "thinks" by the inch and "talks" by the yard and should be moved by the "foot".

To start with we are most fortunate in our opportunity to work with children of the first three grades, for these years are of great importance in the life of any child.

I am going to write of my own experience dealing with the blind child and his reaction to well thought out, and worked up projects. I find the child enjoys making all objects, if possible, used in the project, such as the log cabins, church, Indians etc., used on the sand table in the story of the Landing of the Pilgrims. The children in my room secured for this project reed from the shop to use as logs. The logs were measured by the children and cut all the same length, then heavy notches were cut on one side of the log an inch from the end, when this was finished the building began, each notched log would fit securely on the other log, so up goes the cabins and church. The roof was made of heavy brown paper; as you can readily understand this progress would be of far more value and interest to the child than the "bought" prepared building blocks. The whole of this project can be made by the child, and a large per cent by the totally blind child, with a little guidance from the teacher.

In our study of nature in the third grade, we used a little reader, "The Pet Club"; you have never seen more interest manifested in any subject; after the children read two or three stories the cry went up "O, Mrs. Williams, let's have a Pet Club!" Of course I was eagerly waiting for these symptoms—then the cry, "What can we make our pets of?" I suggested modeling clay and put it on my desk—well then the fun began—to my amazement the children made wonderful pets ranging from "snakes" (made by the boys) to pink elephants, and I will say the birds were lovely made of colored clay; for instance a bluejay was made of the blue clay with a small amount of white. A bluebird was made of blue clay using a bit of red for the breast. One thing that appeals to me is the kind and sweet attitude of the child with some vision for the totally blind child. In working with our clay birds the blind child as a rule comes out of the race with a bird, he gets so vitally interested that he works alone and does well, but observing my class just before the final day to vote on the best bird, the totally blind child will get some help from a child with vision, but in the end the blind child has received the same amount of stimulation.

Of course you know the blind child will ask for the color of clay he would like to work with. Aside from pets the children learned to make intricate and beautiful baskets of the clay. As one demonstration of work from the third grade put on for "The Board of Trustees" this spring was two small boys making clay baskets and airplanes, some of these were works of art and certainly admired by all.

There was one project in my class room this past winter that stood out above all. This project was on the largest sand table with "Our" army, navy, air force, etc. on it. I started accumulating the

small iron soldiers before we ever dreamed we would actually go to war. On this table was a soldier from every branch of the service; the Red Cross nurses, doctors, ambulances, tanks, machine guns, jeeps, etc. I believe every teacher has found the mirror a good substitute for water, hence the Pacific Ocean was a large mirror with battle ships, sub-marines and all type ships used in warfare on it. We also had every type bomber available. The children hovered over this sand table all winter; the first thing every morning they would tell me the war news they had heard over the radio the night before. Each dormitory has a radio in it, so the war news had a real and vital meaning for the children. I think the paratrooper interested them more than any other soldier on the sand table. Speaking of correlating, there is no way to evaluate the actual amount of interest and benefit derived from this one project in connection with every subject. For instance, one small boy asked the cost of one soldier and immediately another asked the cost of one battleship so from these inquiries we had several interesting leads for arithmetic, this running into dollars and cents which was more fun than for me to just give out numbers—for the children those numbers had a meaning. From this the children wanted to get the cost of the furniture in our six room doll house, hence another series of interesting arithmetic lessons. For a lesson in English the children wrote the story of this sand table. One small girl wrote her story so interestingly it was printed in the school paper "The Messenger". Now I will ask you if any teacher could have been more fully repaid for a small sum spent on a project for the pleasure and instruction of children?

I found after trying many things a way to motivate interest in writing. The children in my room were working on a bird and spelling book combined, so I traced heavily different birds in our section and the children with some vision colored the birds and the totally blind children with slate and stylus made beautiful, artistic frames around the bird, they worked out their braille to make a lovely design, the loveliest to me was a cross, some worked out Christmas trees and others houses etc. I have found when I could get the children interested in this type work it stimulates interest in a most astounding way and developes the love for writing.

Another way to create interest in general among the children is to appoint committees each week, have the children write the committees and put these committees on the bulletin board. We as teachers know the effect of publicity and this to the child is nothing short of "publicity". Every single thing is done by the children in my class room in a systematic way. We can never begin too early to teach the blind child to be systematic, as he is prone to be otherwise if not given intensive training in this direction.

We are all facing similar kinds of problems, and we are finding it necessary to be more and more resourceful in building our methods of teaching. There is ever before us the question, "How shall we help blind children to take responsibility and grow in initiative and to develop good study habits?"

Back to the value of well planned projects used in Primary grades we find the project helps to develop the power of observation and stimulates a strong desire in the child to create.

The greatest thing that teachers can do is to train the child in confidence and in awareness of his particular obligation however small his task may be.

Mrs. Emmie Williams

Summary of Grade Teachers Section Discussion

BETTE DIXON—Sub-chairman, "Grade Teachers"
Arkansas School for the Blind

I Social opportunities for the Elementary grade and the teachers' responsibility.

1. Intermediate age is our greatest problem.
2. Social Life
   a. Some Social life planned by dommitories.
   b. Some Social life planned by class room.
   c. Parties planned by Committees.
      1. Pupils form Committees with a faculty member on each.
   d. Hospitality Committee for all visitors, "Thank you" notes, etc.
   e. Assembly Programs, Speakers, etc.

II Reciprocity of ideas with the public school.

1. Scout meetings with Sighted Buddy Troup.
2. Social Service Groups.
3. Church Groups.
4. Exchanging Programs.
5. Public School Pupils come to teach games in Residential Schools

III Emphasis on Reading in the Elementary Grades

1. Some youngsters read too much and some are not interested.
2. Talking Book not to be used to the extent that children do not care to read.
3. Books can be obtained from the Library during the summer.
4. Reading done in Study Hall Hour.
5. Remedial Reading often needed.
6. Reading varies as a regular subject in Schools — often stops with the sixth grade.
7. Library in school aids much in helping children in reading.

IV Teaching a Thorough Understanding of Axis as well as Allies

1. Most youngsters did not know the real differences between axis and allies.
2. Teachers should try to break down the feeling of differences between peoples. Children are better equipped with knowledge that formerly, so can often understand more than we think they can.
3. Are we hurting our children's emotions by our present teachings?
4. Ideals should be "set up" in the school room for later times. Often children are real and deep thinkers. Their feelings should be directed along the lines we hope to be developed after this war.
5. My Weekly Reader-Current Events used give an idea as to the present time and lend to thoughts of the future.
6. We should show our children that the teaching that foreign children have had has made them what they are today.
7. Should we put our children with those of the axis if it is possible or should we not trust these people at this time?
8. Is it possible to guide our children to form their own life view points?
9. The Problem child who takes the German attitude and the results.
10. Can projects be used to put this idea across to our students.

Bette Dixon

SUMMARY

Education of Partially Seeing Children in Urban and Rural Communities

WINIFRED HATHAWAY, Associate Director
National Society for the Prevention of Blindness, New York, N. Y.

Read by Miss Mamie Butler, Supervisor of Sight Conservation
Louisiana Department of Public Welfare

The partially seeing child is one who has too much sight to benefit by the educational opportunities provided for the blind, yet too little to use to advantage those offered for the normally seeing. To meet the needs of such children, 620 special classes have been established in the United States. These classes accommodate 8,200 pupils. There are, however, 50,000 such children scattered throughout the country for whom no provision is made.

Two pertinent questions are often asked regarding the education of these children: (1) Why do they not attend schools for the blind? (2) Since material in the large type used in these classes is not available for partially seeing pupils after they leave school, should not such material be abandoned and all partially seeing be taught Braille?

An answer to both questions is given by no less an authority than Dr. Gabriel Farrell, Director of Perkins Institution and Massachusetts School for the Blind, in a recent issue of THE LANTERN. "Some people," he states, "feel that schools for the blind should accept these children and, in fact, some schools are admitting them. Their presence, however, in a school planned for the blind creates a situation unfair to them and to the children who cannot see. Partially seeing children should have special education designed primarily to meet their needs. The ideal program for the partially seeing child is the 'sight-saving' class."

Dr. Farrell, however, goes on to say that sight-saving classes for partially seeing children must not be confused with the visual-aid classes established in several schools for the blind. He emphasizes this by saying, "Sight-saving classes are for children whose vision range is from 20|70 to 20|200 on the Snellen chart. The maximum vision for admission to a school for the blind is 20|200; ophthalmologists are now permitting pupils in the latter group who have the upper range of vision to use what sight they have to read ink print, preferably in large letters."

Since the question of placing these pupils in schools for the blind is so often asked, it is evident that some do not agree with Dr. Farrell. It therefore seems advisable to discuss the matter in order, if possible to find a solution. According to the latest reports available, there are in the United States, Hawaii and Puerto Rico, 53 residential schools for the blind; these schools have an enrollment of 5,868 pupils. Even if they could double their present registers, what of the many thousands remaining without any facilities suited to their needs. How would it be possible for schools for the blind to accomodate even half or quarter of this number of children without many additional buildings and a tremendous increase in personnel?

One solution of the problem was made through the appointment of a state supervisor for the partially seeing. The law of this state requires that all children be given a visual acuity test and that children whose eyes apparently deviate from the normal be reported to the state department. The state department of education, in turn, reports to the bureau in charge of physically handicapped chil-

dren all those who are in need of special education provisions. In addition, the prevention of blindness department of the state's department of public welfare makes similar reports. The duties of this supervision included a follow-up of all children reported. If there were enough such children in any one community a special class was established for them. If there were enough within the radius of a consolidated school, a class was established there.

In the plan thought next best, the supervisor made arrangements for a partially seeing child to attend a class established in the nearest city having such opportunity to offer. If the distance was too great or the transportation too difficult for daily trips, the supervisor, with the consent of the parents and in cooperation with placement agencies, arranged for a boarding place in this city for week days, the child returning home for week ends.

If none of these plans were possible or practical, the supervisor so arranged her program that she could spend a considerable time with the teacher of the partially seeing child in the school he was attending. Naturally she could not give a course for the preparation of the teacher, but she could and did explain the principles underlying the education of the partially seeing child, and how these might be applied to the pupil in question. She explained the special eye difficulty from which such pupil was suffering, the problems—educational, social, and psychological—that might result from the eye difficulty, and suggested ways of helping solve them. She discussed arrangements for seating, lighting, etc., and planned with the state library to supply the necessary books in large type according to the grade in which the child was, such books to be returned at the end of the term and those for the new term sent. She also suggested material for the use of the teacher. She returned after an interval to check up on the situation and to give further assistance where necessary. If between visits special problems arose, the teacher could take these up with the supervisor by mail. Since her duties related only to the partially seeing child, this supervisor was able to carry a very comprehensive program.

A state supervisor of all types of special education could not, of course, give individual assistance. Such supervisor could, however, if adequately prepared for the work, train county supervisors of special education or lacking these county and elementary school supervisors to work with individual teachers and children, and could encourage them to avail themselves of summer courses for more adequate preparation.

The second question, teaching Braille to partially seeing children, is likewise very pertinent. The lack of material in large type is a serious matter. But it must be remembered that of all the senses, sight is the most important. Many more impressions from the outside world are carried to the brain by this sense than by all the other senses put together. It is natural, therefore, that anyone with sight should use it even though it is defective. Children who come within the classification of partially seeing have enough sight to use this highroad. Hence it is a most difficult and sometimes an impossible task to get them to read Braille with their fingers. The raised dots offer no contrast to the paper, hence to read Braille with the eyes is infinitely more difficult than to read even small print.

There is another phase of the matter to be considered: when the mechanics of reading have been learned and the partially seeing child has succeeded in interpreting what he sees, the task becomes easier and as he grows older he can usually read smaller type because he is familiar with the vocabulary. Again, many partially seeing children have progressive myopia. In cases in which this is not accompanied by pathological conditions of the eye, the progression usually stops between the ages of fifteen and twenty after which the pupil can use his eyes for any size print he can see. If he has used only Braille, this would

mean that he would then have to learn the mechanics of reading ink print.

Again, many partially seeing pupils desire to continue their studies for professional work—law, medicine, science. Much of the necessary subject matter would not be available in Braille and special Braille copies would have to be made. It would be no more difficult to prepare such material in large type if such procedure were absolutely necessary.

But with the promises made for the future, the partially seeing may obtain their information in a more logical way. Schools and colleges will doubtless follow the example of Cleveland and have many lessons and lectures given by experts over the radio. In addition, the ever widening advantages of the Talking Book will supply much needed material. Current material dictated by the teacher into the Dictaphone or Ediphone will be made increasingly available.

The present crisis presents to the partially seeing pupil an opportunity that he has long hoped for—the shortage of personnel is making possible his entrance into professional life as well as into skilled and unskilled occupations. In order to prove his ability to undertake the one for which he is best fitted, the partially seeing individual must have vocational guidance, vocational preparation and proper placement, through analysis of the job and analysis of the individual who is to perform it. It depends very largely upon those who have the partially seeing under their care whether they make good not only in what they undertake now, but are able to hold their jobs after the crisis and thus open the way for other partially seeing people.

SIGHT SAVING IN RESIDENTIAL SCHOOLS FOR THE BLIND

J. C. LYSEN, Superintendent
Minnesota Braille and Sight Saving School, Faribault, Minnesota

Educating the partially sighted has been a rather fragmentary piece of business so far, and has been confined usually to large towns and cities and to a handful of residential schools for the blind.

Before outlining the steps necessary in the establishment of sight saving classes in schools for the blind, I would like to make some observations on Mrs. Hathaway's paper, and with your permission, some recommendations.

Mrs. Hathaway estimates that there are in the United States 50,000 partially sighted (or "partially seeing") children, who have no better outlook now than a frustrated education in small print. Here is a crying challenge to special classes in public schools and to residential schools for the blind. We certainly need more special classes; it's a pity that such advantages are available in only 218 cities. It's a pity too that residential schools for the blind are not supplementing falling enrollments of Braille students, where this occurs, with the admission of an increasing number of sight saving pupils.

Both groups should bend every effort **now** so as to reduce the number of disfranchised, forgotten children, numbering, we are told, at least 50,000.

I confess to some confusion in my attempt to follow Mrs. Hathaway's reasoning in presenting possible solutions. Although she does not say so, I am sure that Mrs. Hathaway has in mind the need of establishing more sight saving classes in our public schools. On the other hand, in discussing the possibility of establishing sight saving classes in residential schools for the blind, the preceding speaker, has all but said, "You ought to do something, but you really shouldn't."

For the "shouldn't" side of the question, Mrs. Hathaway raises the following possible objections: First, she quotes my good friend and colleague, Dr. Gabriel Farrell,

who wrote in the Perkins magazine, The Lantern, on March 15 of this year, as follows: "Some people feel that schools for the blind should accept these children (the partially seeing) and, in fact, some schools are admitting them. Their presence, however, in a school planned for the blind creates a situation unfair to them, and to the children who cannot see. Partially seeing children should not be classified as blind as that magnifies their visual defect. Blind children should not be subjected to contrast with children who can see as that magnifies their sense of disability. Partially seeing children should have special education designed primarily to meet their needs. The ideal program for the partially seeing child is the sight-saving class."

Mrs. Hathaway, in the second place, asks how residential schools with an enrollment of 5,868 pupils could possibly "assimilate an additional 50,000 pupils, or even half or quarter of that number?" She warns against any building program designed to accommodate so many sight saving admissions.

Then, thirdly, the preceding speaker adds that even "as registers in schools for the blind are falling, so the number of partially seeing will decrease, and by the time all these additional buildings and adequately prepared personnel could be made available, it may logically be expected that the demand for such an enlarged program will no longer exist."

Briefly, my reply to these objections is as follows:

The argument against mixing totally blind children and partially sighted children is not a very good premise for excluding sight saving pupils from residential schools for the blind, because:

(1) There is not a residential school in the country, instructing in Braille only, that does not have partially sighted children in attendance. It would be just as logical to exclude the partially sighted Braille students as the partially seeing sight saving pupil.

(2) The association of blind and partially sighted children has advantages that greatly outweigh the disadvantages. When a totally blind child associates with one, who is partially sighted, he is under an intermediate influence that will better fit him for contact with a fully-sighted world.

(3) A sight saving child need not be classified as blind in order to attend a residential school. Do as we did in Minnesota—change the name from School for the Blind to Braille and Sight Saving School.

(4) Sight saving classes can constitute as ideal a program in a residential school as in a public school. Special class teachers and supervisors recognize this fact in that they are willing to send their problem children to residential schools.

I do not believe that residential schools would be willing to embark on building programs big enough to handle even a fourth of the 50,000 partially sighted children in this country. I see no objection, however, to supplementing a falling Braille attendance, where this occurs, with a corresponding increase in the admission of sight saving students.

I feel, too, that Mrs. Hathaway is rather optimistic in her suggestion that the present number of partially sighted children, some 50,000, might be drastically cut because of legislation and new drugs. I say this, advisedly, even though enrollment at our school was cut from 28 per cent to one and one-half per cent when ophthalmia neonatorum was nearly erased through a simple board of health stipulation, namely, that the eyes of every new-born baby should be treated with a prophylaxis. Despite preventive measures, we will always have a certain percentage of visually handicapped people.

If there are 50,000 partially sighted children in our country (I have no reason to doubt the figure) and if sight saving classes have an enrollment of only 8,200 children, and residential schools only a handful of children in their sight saving classes, then, it would seem to me that the time has come for us to bring this problem to the attention of the National Educational Association (if it has not

been done already). Surely, here is a problem, which by virtue of its very size, requires the attention of everyone concerned.

Either I have been asleep these ten years, or else New York State has hidden its candle under a bushel! In her discussion of the New York plan, Mrs. Hathaway stated, "She (the supervisor) discussed arrangement for seating, lighting, etc., and planned with the State Library to supply the necessary books in large type according to the grade in which the child was, such books to be returned at the end of the term and those for the new term sent." Here, apparently, is a state which has solved the sight saving text book problem. "Eureka!"

Some years ago, I became interested in the possibility of learning what could be done by State Departments of Education in providing sight saving books for partially sighted children in their own home communities. I consequently visited Toronto, Canada, and secured several copies of text books, which had been produced by the photo electric off-set process. I found, however, that only a beginning had been made; a spelling book, and a book on literature alone were available.

Several weeks ago, I took up the matter of sight saving books with our State Commissioner of Education. One problem immediately reared its unsurmountable head; how could our state possibly parallel with sight saving books the variety of text books used in the various school districts in the same grades.

I understand that Mr. A. C. Ellis, Superintendent of the Printing House for the Blind at Louisville, Kentucky, is to discuss the outlook for our securing an adequate supply of sight saving text books. If such books can be printed at Louisville, and made to parallel current Braille texts, then, it is conceivable that residential schools for the blind will have solved their sight saving problems, ahead of special classes in public schools. Special classes, even though they were to secure sight saving books from Louisville, would still face the dilemma of diversity of text books in their own communities.

Minnesota was the first state in the Union to establish a sight saving department in a residential "school for the blind." This took place in 1925, 19 years ago. Our sight saving department has proven moderately successful and has not been too expensive.

Our special classes have proven a Godsend to partially sighted children, who have lived in rural or urban areas, devoid of sight saving classes. The advantages are self-evident, when we compare the supposedly good records made by children in public schools before transferring to our school. We often find it necessary to set transfer students back a year or two to their proper grade level.

Some of you will recall that I discussed sight saving at our School in a paper, which I presented at the A. A. I. B. conference at Lansing, Michigan, in 1938. The material, which I gave then, could be given almost verbatim now, as there has been so little change.

I propose to discuss the establishment of sight saving classes in schools for the blind under the following headings: Eligibility, personnel, equipment and problems.

Eligibility—The Minnesota law is excellent in that it sets no definite limits on eligibility, as for example: 20|200, 20|70, etc. The law simply states that children, whose vision is too defective to profit by instruction in the public schools of the state, are required to attend our school at Faribault. This requirement is waived in areas, where there are sight saving classes. Admission is by application, giving the superintendent the authority to deny admission because of mental retardation, contagious disease, or a crippled condition.

Under our law, then, we are free to admit children with more than 20|70 vision, if circumstances warrant it. We exclude children with monocular vision. Questionable cases are submitted to our ophthalmologist. Our practices have been reviewed by outstanding ophthalmologists, who have attended eye clinics at

our school. These men have been unanimous in declaring that we have not had a single student, who should be in public school.

Limiting attendance in schools for the blind to an upper level of 20|200 vision will not exclude sight saving students. We have children with 20|200 vision and less who use sight saving books; we have also had children with more than 20|70 vision, who were Braille pupils. Placement in Braille or sight saving departments is a very individual matter. Statistics covering the past biennium at our school substantiate this statement. Our Braille department, numbered 84 students, and had the following vision distribution: Totally blind, 48; less than 20|200 vision, 26; 20|200 to 20|70, 9; over 20|70, one. In our sight saving department, numbering 66 pupils, we had the following: Less than 20|200, three; 20|200 to 20|70, 46; better than 20|70, 17.

I want to conclude this section on visual eligibility by stating that the dangers attending myopic cases are too often over-emphasized. Mrs. Hathaway said the same thing in her paper. Myopia as such should not, in my opinion, call for Braille, per se. Most of the cases, even those which are progressive, "settle down" after arriving at a level, which is safe enough for sight saving demands.

Personnel—I indicated earlier in this paper that adding a sight saving department in a residential school is not too expensive. We get along with one sight saving teacher. She handles reading and writing in the first three grades and some of the language and spelling work for the promary students. Perhaps it would the primary students. Perhaps it would sight saving groups further—up to the seventh grade—but our experience in that respect has shown no outstanding advantages.

Beginning with the fourth grade our Braille and sight saving students go to the same classes under the same teachers. This mixing of student groups does present problems. The outstanding one crops out in arithmetic in long division, or in a series of fractions. Sight saving students work out such problems in much shorter time than their Braille classmates. We compensate for this by enriching sight saving students with extra problems.

One more thought—our sight saving teacher instructs; she is not called upon to read to students with a view to coaching them in preparation for classes taught by other teachers. Our sight saving students are required to do their own reading and thinking.

Equipment—Sight Saving equipment is not too difficult to secure, nor is the organization of a sight saving class room a very mysterious process. Its chief concern is sufficient and proper light. Daylight, properly controlled, is preferred. This must be supplemented with proper artificial illumination, also controlled so as to avoid glare. For both types of illumination the class room must be painted up to a few shades from white on the ceiling to light cream on the walls. Dark floors should be sanded and sealed in the natural color of the wood.

We control the amount of daylight admitted to the class room by using roller shades that go up for the upper half of the window and down for the lower half. In other words each window has two shades, originating at the center. Artificial light is furnished entirely by totally indirect luminaires of 500 watts each. These give us a reading of 17 foot candles or more. Were I to install luminaires again, I would use a type that would provide some direct illumination diffused through heavily frosted panels. I should add that all of our class rooms, not just the sight saving room, are lighted as just explained. A recent experiment, featuring vapor tube lighting, proved a disappointment. Occasional flickers and absence of yellow light bothered the children.

All of our class rooms are equipped with modern school desks, having adjustable tops so that books can be propped up at the required angle and at the right distance from the eyes. Equipment in-

cludes slate blackboards and soft chalk. Then, too, there is special ruled paper, which has no glare, and where the lines are at least three quarters of an inch apart. Pencils are of large calibre and the lead is number two. There are 18-point typewriters. Texts are the so-called 24-point "clear type" books. They end with the sixth grade.

Problems—The most important part of the equipment is text books, and therein lies our real problem. I hope that Mr. Ellis has a solution. I would like to state in passing that the sample of sight saving printing, put out by the American Printing House for the Blind in 18-point type several years ago, proved adequate for at least our upper grades. We find that our high school children prefer 18-point type to 24-point type. It is conceivable that the right kind of bold type face in 14-point might prove rather adequate for the majority of our sight saving pupils.

We feel that we can legitimately carry on sight saving at our school in the upper grades even though we lack suitable large print text books (which we would like to have). A school, designed for Braille classes, has class room talking books. These prove invaluable for book reports. Furthermore, oral instructions designed for Braille students is just as applicable to sight saving students.

There are no special problems in the industrial and music departments. Blind instructors teach sight saving students successfully.

In their cottage life we observe that our boys and girls choose their friends on a basis of compatibility, and sight or absence of sight appears negligible as a deciding factor. Students are assigned to dormitories by housemothers and housefathers on basis of characteristics and temperament.

In closing, I want to express the fervent hope that my colleagues in residential schools will consider carefully the challenge of the forgotten child. He's the little fellow, who does not live in an area supporting special classes. He's the boy, who is trying to compete in a public school and is slowly but surely being pushed aside. For him the only ray of hope now is the residential school equipped with a sight saving department.

Even though our residential schools can absorb only a small per cent of the existing 50,000 children with marginal vision, it is imperative that we do what we can now. Let's set a goal of at least one sight saving teacher in every school for the blind. If our 50 schools can take in only 20 children each that will amount to 1,000 pupils, or 2 per cent of the total. It is my contention that if I can't have the whole box of chocolates right away, I'll take one piece now.

THE NEED FOR AN ADEQUATE SUPPLY OF SIGHT-SAVING TEXTBOOKS AND SOME POSSIBILITIES FOR OBTAINING THEM

A. C. ELLIS, Superintendent
American Printing House for the Blind

The excellent papers by Mrs. Hathaway and Mr. Lysen seem to have established the need for sight-saving textbooks. The very large number of children with visual handicaps who are not now enrolled in special classes, and the increasing number and percentage of such children who are being enrolled in the residential schools for the blind, testify eloquently to the need for adequate text materials for this group of children. This need is further attested by the large number of inquiries received each year from residential schools and from public schools for such texts, especially at the high school level.

For the purpose of this paper, I feel that we may assume that a need does exist, and that during this discussion we

may concern ourselves primarily with methods of obtaining the books.

We are told that there are approximately 65,000 partially visioned school children in the United States who could be served by books in large print. This number is relatively small when compared with the large number of children with normal vision who are enrolled in our public schools. The printing and distributing of sight saving books to such a numerically small group would never become a commercial undertaking which would attract investment capital sufficient to build and maintain one or more special publishing houses operated for profit. If textbook publishers find it difficult to make money out of publishing books for children with normal vision in the public schools, it is fruitless to assume that any way can be found to maintain facilities on a commercial basis to supply sight saving books for the less than one per cent of children who have major visual defects. It seems, therefore, that any successful plan must be built upon a subsidized, non-profit agency which can, in some way, render this highly specialized service.

It has been suggested that the various states should make large grants for the printing of books in large print and try to interest the textbook publishers in supplying small, special editions of some of their more important texts. The numerous state and local multiple adoptions of texts would create a demand for so many different texts in each field that the normal business hazard of not being able to sell the copies of special editions would discourage the investment of much money in such an enterprise.

It has also been suggested that print shops in public trade schools, printing departments in schools for the deaf, and even print shops in the penitentiaries, be encouraged to print books for the visually handicapped children. In a few cases, books have been printed in these training print shops. Such projects have not been very successful because the interest in them is local in nature. Books under local adoption have been printed and supplied to the schools in the immediate community. The demand for copies has been small and interest has dwindled.

There is always a certain amateurishness unavoidably associated with the books produced under such conditions. The books are printed primarily as a project for training printers and bookbinders. The work is done largely by beginners, and the objectives and philosophy behind the project are not understood. For acceptable results the printing of sight saving books requires the best efforts of experienced printers who are working under plans which envision a nation-wide service which has been thoughtfully and purposefully formulated.

Mr. Lysen has suggested the possibility that the American Printing House for the Blind might be able to solve the problem of the residential schools by publishing sight saving editions which parallel the Braille books supplied to the schools for the blind. Such a proposal presents no serious technical problems. Much of the printing and binding equipment now used in the production of Braille books and magazines could be used in the publication of sight saving books. The Printing House is a going concern with numerous and valuable contracts with the leading textbook publishers. The present staff, through its familiarity with the problems of publishing Braille and Talking Books, has obtained a store of knowledge and experience which would be an asset in establishing a new department.

There is also a need for a large after-the-war project at the Printing House to absorb more than twenty employees who are now on leave serving in the armed forces. Many of these men have had long experience at the Printing House and could easily be retrained to fill positions in a new department for printing sight saving books.

The possibility of printing sight saving books at the Printing House has been the subject of much thought and experimentation. Several years ago an experimental book was published. Copies were

widely distributed and comments and criticisms were invited. The book was favorably commented upon by all who responded. There is every reason to believe that the Printing House could produce books in large print which would satisfy every reasonable technical requirement.

The real problem is one of finance and control of policies. The Act of 1879 "To Promote the Education of the Blind" provides that the annual appropriation to the institution shall be expended in the production of embossed books and tangible apparatus for the public institutions for the education of the blind in the United States and its territories. It might be necessary to amend this act before any of the money could be used to provide sight saving books on quota accounts. If the Trustees should decide to seek such an amendment, they would face the possibility of the public schools being able to qualify for allotments of books in large print. This situation might conceivably result in enlarging the Board of Trustees to include the several hundred superintendents of public schools who have sight saving classes in their systems. The per capita might also be reduced from the present figure of about $20 to a very small amount. Such an eventuality must be anticipated and prevented.

The Charter of the American Printing House for the Blind, as amended in 1941, contains the following provision:

"1. The nature of the business of the corporation, in addition to the publication and distribution of books in Braille for the blind, shall consist of the production and distribution of topographical maps, Talking Book records and machines and any and every other kind of apparatus that is now in use or that hereafter may be used in the education of blind persons by any one or more of the public institutions for the education of the blind in the United States and its territories."

This is a very broad provision which might be interpreted to include sight saving books, provided, of course, that funds were made available through some other source than the present appropriation. I have often thought that the situation could be simplified by establishing a revolving fund to support a department for printing sight saving books. In that way, the Trustees could select and publish a list of texts in large print which would be sold for cash, at actual cost, to the residential schools and to the public schools that maintain sight saving classes. The fund would thereby be replenished, making the project self-sustaining, so that no troublesome questions of control and policy would arise to plague us.

The conclusions which may be drawn from the foregoing are:

1. The publishing of sight saving books is a small, limited field which should be developed through a non-profit corporation.

2. If the American Printing House for the Blind undertakes to develop a department for printing sight saving books, care should be exercised to see that it does not overshadow the original purposes of the institution or alter its fundamental nature.

3. Such a department should be integrated with the present programs for publishing Braille and Talking Books, to the end that we shall have an adequate literature for the education of our blind and near-blind students.

THE COORDINATION OF PUBLIC EDUCATION AND SPECIAL SCHOOLS

(Abstract)

T. M. STINNETT
Director, Division of Certification
Department of Public Instruction, Arkansas

This war has, or should have taught us some impressive lessons. First, it has taught us something of the power of education; the perversion of education. Second, neglect of schools designed for special persons has been a fundamental mistake from a production standpoint.

The fundamental thing for which we fight this war—comes down to this point —so that every human being shall have his right and his chance to make his contribution to the common life.

That's fundamentally the task of the special school. I am afraid that public education either for reason of its youth or for other reasons has not in the past been all inclusive enough in its outlook. I have no doubt that public education has done a good job in service, both to the nation and to the individual, in those cases where the individual gets educated in normal and usual ways. But with those who do not, we haven't done so well.

It is no secret that the schools have done poorly with the extremely bright, the extremely slow, and those who must learn in special ways.

For the purpose of coordination, then, public education should:

1. Should be all inclusive enough to encourage the needs of special groups of children, in those centers of population sufficient to justify.

2. Where conditions will not permit the all-inclusive program, special schools serving an area or region should be a major concern of those in public education. We cannot escape that responsibility.

3. Facilities and curricula of public institutions should be so synchronized with those of the special institution as to offer supplementation and a continuation of the educational opportunities for children in special schools.

4. There should be an easy flow of students from special to public schools through an adjusted evaluation of work.

5. Public education should provide for training of teachers of special schools.

6. Guidance programs in public schools to acquaint children who need information about special schools.

7. Public schools should maintain a constant and continuing file of children in their care, for reference to special schools.

8. Realization by both that this is really one job—the education according to his needs of every child under the American flag, that's all inclusive and integral. Nothing short of perfect cooperation and perfect synchronization of foundation and effort will assure its job: that is the obligation of both.

REPORT OF THE COMMITTEE ON STATISTICS OF THE BLIND

EVELYN McKAY

The Committee on Statistics of The Blind, jointly sponsored by the American Foundation for the Blind and the National Society for Prevention of Blindness, has continued its annual compilations of figures on eye conditions among pupils in schools for the blind, which were inaugurated in 1933, at the request of this Association.

Since the findings of those annual studies have been published in the "Outlook for the Blind," and reprinted for distribution to the superintendents of schools for the blind, there is no need to repeat the

figures here. I may say, however, that the study for 1941-42 has been published. The study for 1942-43 is practically ready for publication, and we have already begun work on the tabulations for 1943-44, the school year just ending.

The 1940-41 study included 49 schools and 4,739 pupils. The 1941-42 study covered 53 schools, but included only 4,604 pupils. This was due to the fact that two of the larger schools were unable to secure ophthalmological service and were therefore unable to provide us with the eye examination reports on which the studies are based. This is, of course, a war-time situation which apparently cannot be avoided and we fear that the current year may bring further decreases in coverage.

We greatly regret such reductions because, following the recommendations of your convention in 1938, we have been striving to have all the residential schools and day school classes for the blind represented in the study. The reliability of the findings would be further insured by that achievement, and the comparability of the figures from one year to another would be greatly increased. Apparently the goal of one hundred per cent coverage will not be reached until the war is over, but we urge those of you who can possibly do so, to continue your participation in the studies, so that they will maintain at least their present degree of coverage and the validity of the figures will not be seriously impaired.

We have done some experimental analysis of trends of causes of blindness over the past ten years, but have found that the figures are so much affected by the inclusion of additional schools from time to time and the occasional dropping of participating schools, that distinct trends cannot be determined. This is an additional reason why we are making every effort to have every school included on the study every year.

We have also done some analysis of the data on amount of vision remaining among the pupils included in the studies. More than 10 per cent of the pupils reported, have too much vision, to fall within the generally accepted definition of blindness (20|200 central visual acuity in the better eye with correction.) This percentage varies only slightly from year to year. Since sight saving class pupils are specifically excluded from these studies, it must be assumed that those children are being educated by tactual methods.

It does not lie within the province of a statistical committee to make recommendations on a question of this sort for the matter is primarily one of educational policy. However, in view of the substantial number of children whose welfare is involved (452 in 1941-42) the problem is urgently commended to your attention.

In closing, I want to express the thanks of the Committee to all of you who by your interest and continued participation have made these studies possible. Many of you have indicated that you consider the findings worth while, and we believe that they will become even more valuable as more and more schools join in them.

Moreover, we believe that the annual figures could be of greater practical usefulness to superintendents if we could publish them more promptly—say within three (3) months after the close of the school year. We are now equipped to carry out our share of the work without delay, but we are faced with the difficulty of getting the data sent on to us promptly. Most of you are gratifyingly punctual in sending in the original eye reports and in answering our requests for supplementary information, but often one or two schools are slow in doing so. Delay on the part of one school means delay for the whole tabulations for that year, because with the mechanical punch card system we are using, we cannot begin to count and tabulate until all the reports are complete.

I venture to mention this because I feel that when you understand the situation you will want to remedy it, and will send us the necessary data as early as possible.

We shall appreciate it very much as we appreciate all your past co-operation and once again, our thanks.

A REVIEW OF THE *"OHIO" STUDY OF BRAILLE CLASSES IN RESIDENTIAL AND PUBLIC SCHOOLS

J. C. LYSEN
Chairman, Joint Advisory Committee on Research

No one regrets any more than I the absence from this convention of the three men of Ohio, who brought this particular research into being. I refer to Otto F. Meyer, teacher and field representative, and W. G. Scarberry, Superintendent, both of the Ohio School for the Blind, and Dr. Charles Scott Berry, Department of Special Education, College of Education, Ohio State University. The research work was done by Mr. Meyer under the supervision of Mr. Scarberry and the guidance of Dr. Berry.

The study is based on a 22-page printed questionnaire. I remember it well. It was so thought-provoking that I had a regular field day writing in my answers. Little did I realize then that my opinion added to that expressed by my colleagues in other schools for the blind would add up to a result not unlike voting for the political party my "Grandpappy" belonged to. Heads of residential schools and public school Braille classes will, I am sure, feel as I do when they read the "Ohio" report.

Permit me to illustrate: Under "Evaluation of Common Criticisms" (Chapter VI) appears this statement, "Residential schools provide teachers better prepared to meet the requirements of the work." Seven per cent of the residential schools say this statement is not valid while 93 per cent say it is true." Now notice the diametrically opposed day school vote: "Of the public day school replies 93 per cent say the statement is false and seven per cent say it is true." Here is another example: "When the sightless child is in the same classes with seeing children the teacher is too lenient in grading the blind child thereby causing him to have an exaggerated conception of his accomplishments." Eighty-seven per cent of the residential schools indicate that this statement is true; 87 per cent of the public day schools feel it is not true.

The balloting is, naturally, not always as even as that just cited. Sometimes there is fair agreement.

The study, seriously speaking, has condensed a wealth of sound information and opinion.

The introduction to the monograph declares: "It is to be understood that the present study is an attempt to bring together in one place the plans, methods, and facilities of both the residential schools and the public day school classes for Braille students for a comparative analysis rather than for criticism of either."

The Ohio project rightly confesses its inability to "adequately solve" any of the problems raised by the questionnaire. This is Mr. Meyer's explanation: "This study has collected and presented a mass of interesting and valuable data, but it is this very mass which has been its greatest handicap; for, in dealing with such a wide variety of phases of the educational program of residential and public day school Braille classes it has been impossible to adequately solve any of them."

Out of the study, however, has come several definite suggestions for subsequent research projects. They are:

(1) "A follow-up by all schools of their graduates to determine their success after leaving school in the matter of becoming self-supporting."

(2) "A careful and complete analysis of the boarding home question as suggested

* The full title reads: "A study of respective values and services of public school Braille classes and residential schools for the blind to determine which plan of educating the blind child is better suited to his needs."

in Chapter V, to determine if 'any home is better than any institution'.

(3) "A comparison of residential schools and public day school Braille classes on a state-wide basis in those states where both types of school are found. Complete and comparable data should be available for such a study.

(4) "A complete statistical study of the common criticisms and statements presented in Chapter VI." (Evaluation of Common Criticisms)

I will now attempt to give the highlights of the chapters which comprise this study.

Introduction. Residential schools made a 51 per cent response to the questionnaires; public day schools, a 63 per cent response. From 53 residential schools came 27 usable replies (completed questionnaires) and 10 letters. Twenty-seven public day schools sent in 17 usable replies and one letter. Although questionnaires were sent to 48 Departments of Education and to the Special Education Departments of 54 leading colleges, the replies were so few as to be excluded from statistical study in some parts of the problem. Lack of response from the last-named groups indicates absence of a comprehensive plan and understanding of the whole problem of the education of the Blind, Mr. Meyer concludes.

Chapter I, Historical Background. This part of the study is very brief and mentions in passing the first school for the blind established in Paris about 1784. In 1791 a school was opened in Liverpool. Between 1829-1833, schools were established in Boston, New York and Philadelphia. By 1930 there were 58 residential schools for the blind in the United States —eleven privately controlled and 47 under some form of state control. The first day class for the blind was organized in Chicago in 1900. Such classes are maintained today by 21 city school systems.

Early schools received their impetus from some interested individual; private aid was followed by state sponsorship. Control, first vested in boards of trustees, gave way usually to supervision by state agencies. The trend has been from control by Departments of Welfare to control by Departments of Education.

Chapter II, Basic Philosophy. I shall quote the "summary and conclusions" by way of outlining the material in this section.

"Complete plans for the establishment of Braille classes were submitted by six states and provide for special classes for Braille pupils in cases where at least five pupils reside within a school district and make it mandatory upon the petition of a sufficient number of parents or guardians of such handicapped children. In states where no such plan is in effect they generally concede that the large urban centers might establish such classes but the sparse, rural areas would not find it practical.

"In the matter of country units, the same viewpoint was expressed. Urban counties might be used as units but rural counties would not have sufficient Braille pupils.

"The minimum number of pupils that each center should have seems to be ten in the opinion of the residential school people and five or six in the opinion of the day school teachers.

"Ten miles or a ride of one hour is the distance generally agreed upon as the maximum distance pupils should be transported to a public day school center.

"The point of view of residential schools seems to be overwhelmingly that if a combination of the two schools is to take place it would be preferable to have the child receive its early training at a good residential school and return to the local school for the high school training. The public day schools show a rather evenly divided opinion on this matter.

"A great majority giving definite answers to the question of sending a child with very poor home conditions to a residential school, seem to favor this plan. The comments seem to follow the pattern without giving proof that institutions do not provide satisfactory living conditions.

"In regard to a change of name, 'School

for the Visually Handicapped' received the majority of support but the other suggestions have considerable support and merit.

"In a discussion of who shall bear the cost of educating the sightless child most replies favored the entire cost being paid by the state as a part of its educational program."

Chapter III, Study of Teacher Training, Experience, Salaries and Duties. Though short, this section is meaningful because of the number of supporting tables. Mr. Meyer compares here teachers of Braille in residential and public schools, whereas Dr. Berthold Lowenfeld in his study, "Teachers of the Blind; Their Status and Salaries," compared teachers of the blind in residential schools with city teachers in public schools.

Mr. Meyer's summary and conclusions read:

"Public day school teachers of Braille pupils show a slightly higher degree of preparation, both as measured by years of preparation and highest degree held. This same situation is also found in years of experience which is another measure of teacher preparation and professional standing.

"Teachers' salaries in public day schools are much higher than in residential schools, even if an adequate and accepted adjustment is made for living accomodations and other services received in the residential schools.

"The number of hours of teaching duties per week for both groups were quite comparable. In the case of high school teachers in public schools only one teacher was reported which makes any distribution meaningless."

Chapter IV, Study of Enrollment and Program Provided. Twenty-three residential schools reported 880 boys and 643 girls in grades 1-8 for a total of 1,523, which is an average of 67 elementary pupils for each school. Sixteen public day schools reported 96 boys and 68 girls in grades 1-8 for a total of 164, which is an average of ten elementary pupils per school. Sixty-four per cent of the pupils in residential schools and 66 per cent of the pupils in public Braille classes are in the elementary grades.

Overageness in residential schools is much more prevalent than in public school Braille classes, 62 per cent as compared to 11 per cent. Overageness in residential schools appears in kindergarten and first grade, indicating failure of parents to enter their children as early as they should. It is apparent, too, that residential schools are doing what they can for borderline mental cases—hence, raising the overage average.

The second part of this chapter, dealing with curricula offered Braille students, is illustrated with a number of tables and gives some very pertinent information. After qualifying his conclusions with this statement, "If the schools reporting.....can be considered typical of all schools.....," Mr. Meyer states, "A much higher percentage of pupils attending public day schools are enrolled in the college preparatory (79 per cent in public day schools as compared with 43 per cent in residential schools) and general curricula, while the pupils who attend the residential schools receive a much wider preparation for living in the form of training in Home Economics, Industrial Arts, Commercial, and Music curricula (57 per cent in residential schools and 21 per cent in public day schools)." Home Economics stacks up as follows: Residential schools, slightly over one unit per girl; public day classes, about one third of a unit per girl. In industrial arts courses, residential schools provide eight-tenths unit per student, public day classes, one-tenth of a unit. Residential schools lead also in student participation in commercial and music courses.

The writer rightfully raises these questions: "Should most Braille pupils be enrolled in the college preparatory, the general or the vocational curricula and courses?" This question, he states, raises further questions, thus: "What percentage of Braille pupils who have graduated from high school attend college?" "Is the general preparation given in the gen-

eral preparatory curriculum the best training for the future happiness of handicapped individuals?" "Do the vocational curricula prepare blind pupils to earn their living, either in whole or in part?" "Do the vocational curricula prepare the individual to contribute to the home, in the form of services rendered?" "Does music play an important part in the life of a blind person?"

Chapter V. Study of Miscellaneous Services and Activities in the Training of Braille Pupils. This intensely interesting chapter focuses its attention first of all on social adjustment, which includes vacation activities, personality training and blindisms; a study of health services supplied Braille pupils; a study of health and dietetics programs; guidance; and follow-up programs.

Social adjustment of Braille students was studied on a percentage basis in public day school classes. Nine schools, for example, answered the question, "what per cent of Braille pupils become leaders in extra-curricular activities?" The highest per cent reported was 100; the lowest, ten; with 35 per cent as the average. One of the school comments reads: "Social adjustment depends more on the personality, background and ability of the child than upon his blindness." The study on social adjustment in residential schools was based on such items as pupils going to church, belonging to scout troops with sighted children, etc. Reports vary greatly. Mr. Meyer suggests "a free exchange between the schools of those procedures which are most successful."

Vacation activities as a part of social adjustment is pretty well summed up in these two sentences: "To say that there is no problem since the child spends his vacation with his parents is no more valid for public day schools than it is for residential schools. In both instances guidance given to parents should be of such a nature as to promote the full growth and adjustment of the blind child, rather than let summer time be a period of retardation."

A number of interesting pages are devoted to a comparative study of the personality training of Braille students. Questions put to both types of schools were: "How do you attempt to develop the social qualities (courtesy, leadership, loyalty, courage, friendliness, punctuality) of your Braille pupils? How do you attempt to develop the emotional qualities (self-control, sensitiveness, stability)? How do you attempt to develop desirable traits ((trustworthiness, industry, initiative, persistence, physical vitality and body care)?" And, "How do you develop right study habits and mental attitudes?" Suggestions are varied and comments are worth reading. It is difficulut to say worth reading. It is difficult to say in personality training. Residential schools, naturally, have the greater responsibility "since they are the sole guardians of the child for the greater portion of his growing years."

Blindisms are studied under five headings: Body, Head, Facial, Hands and Shuffling Walk. Data submitted show that a very high percentage of blindisms occur in the early age of childhood or before the child reaches ten years of age. Corrective measures are discussed. Locating the preschool child and working with the mother is invaluable as the habit is attacked before it becomes too entrenched.

Time does not permit my summarizing other topics in Chapter V.

Chapter VI. Evaluation of Common Criticisms. I referred to this chapter at the outset of my review. The questionnaire listed criticisms often found in our professional literature. Mr. Meyer states, "Many of these statements have been frequently used in such writings but often definite proof is lacking which should establish the validity of those same statements." No review can illustrate this part of the study. It has to be read to be appreciated.

SOCIAL ADJUSTMENT IN RESIDENTIAL SCHOOLS

J. M. WOOLLY
Principal, Arkansas School for the Blind

Mr. Chairman, Ladies and Gentlemen:

In the beginning may I say that the title of my paper may be slightly misleading, since the program I am to tell you about was not only social adjustment in scope, but to some extent also personal.

You are perhaps not interested in the mechanics of how our program worked, but I will tell you that we were able to insert a 30 minute period into our morning schedule during which no Junior or Senior High School subjects were scheduled. It was this period we used for our social adjustment classes.

We had long recognized the need for better social adjustment in our students and attempted to do more about it during the 1942-43 school year by teaching table etiquette to all Junior and Senior High School students. Of course, we had had faculty supervision in the dining room for years. But this did not always obtain the desired results.

A sylabus was prepared by Miss Eula Shults, our Home Economics teacher for use by several of our teachers during the regular scheduled classes.

This year we determined to do more along the line of social and personal adjustment. A Steering Committee was appointed by Superintendent Davis. This Committee then selected several phases in which we felt our students were especially weak, to be used as teaching subjects this year. New year we plan to continue some of this year's subjects and to add some new ones.

To begin, we divided our student body into 3 groups for instructional purposes. Three teachers then spent 1 week discussing **Personality** and preparing what we chose to call a **Check Sheet** for each student. This sheet was simply a listing of the things in which the student thought he needed improvement. The faculty then discussed each sheet and added to it anything which the student had overlooked, after which a conference was had with the student to explain why we had added items.

At the end of the year another conference was had with the student to talk over with him the improvements he had made. This same sheet was again used as a basis for the conference. After this last series of conferences at the end of the year, each teacher was asked to nominate one boy and one girl to be awarded a Twenty-five dollar War Bond given by Mr. H. A. Emerson, a former member of our Board of Trustees. These Bonds were to be awarded to the boy and girl who had made the most progress in social and personal adjustment during the year. Each nomination included reasons why that particular student should receive the award. The nominations were then reviewed and the award winners selected.

The second series of units which were taught for three weeks to each of our three groups were: Table etiquette, Introductions, Invitations and conversation, and Personal Appearance.

For the third series we chose Eurhymics, Manners at Home and in Public Places, and Boy and Girl Relationships. This unit was two weeks in length for each group.

Fourth, we taught Blind-Sighted relationships, Music Appreciation and Blindisms. This unit was also two weeks in length for each group.

The final unit consisted of games, Periodicals and use of the Radio and Telephone, for a two weeks period.

In addition to these class activities we had several speakers from the city and state at our assembly programs who were especially selected because they had something to offer which we felt would fit in with what we as a faculty were trying to do. For example, Dr. Marion A. Boggs, Pastor of the Second Presbyterian Church, Little Rock, reviewed Dr. Harry

Emerson Fosdick's book "On Being a Real Person".

Each topic of the various units was taught by members of the faculty whom the steering committee felt were especially qualified to teach that particular topic. After the topics were selected and assigned the teachers were asked to submit a teaching outline of their subject to the Committee.

The social life of the student body was built around this program this year. As each unit of instruction was finished and often during a unit, some special feature was planned and executed by some one or more of the 3 groups into which the student body wa sdivided. For example at the conclusion of the table etiquette course a banquet was given. As you noticed, two other courses were also in progress at this same time, namely, **personal appearance** and **Introductions, Invitations and Conversations.** Each group was responsible for some phase of the banquet. One group planned the Menu, another the Program and the third did the Decorating.

Early in January we began to teach the boys and girls to dance. Very few of them were able to do so in the beginning but before the end of the school year all were fairly proficient. For music for dancing we started to use the piano. After two or three dances, we shifted to the record player using records which we felt were usable by our beginning group. By the middle of the second semester we felt that we were able to start using a small dance band formed by the students. This band was composed of piano, accordion, base viol, clarinet and two guitars.

We had one formal dance near the close of the school year. We felt that dancing has done much to develop in our students a better sense of balance thus enabling them to get around far better than they were able to before the program started.

Until this year our boys and girls were together only in class and at a very limited number of entertainments. This year in addition to dancing, picnicing, and other more or less formal entertainments we allowed them to skate together on our new skating rink once a week. This, of course, as all other activities were, was supervised by one or more faculty members.

In the student dining room, tradition kept boys on one side and girls on the other. However, we determined to try seating both boys and girls at the same table. We shifted them about from time to time so that everyone became acquainted. One partially sighted boy or girl served as host or hostess and did the serving at each table. Our experiment proved highly successful in that it helped a great deal in our efforts to improve table etiquette and social conduct in general.

In conclusion may I say that we feel that our efforts have been well repaid in the advancement we have seen in almost every member of our student body. We have seen much of the stiffness in their walk disappear, introductions have become increasingly easy for them to perform. Many of their blindisms have disappeared, and in general our students have come to approach a state of normalcy which we have long desired and often despaired of ever obtaining. I firmly believe that this program has now become a permanent part of our curriculum.

The student response was very gratifying. It is needless for me to say, of course, that small problems arose from time to time. But we feel that there were no more and none more serious, than would have been met under our old setup. Students took in their stride their new privilege of dating, and all in all were much more like normal high school boys and girls.

REPORT OF THE JOINT ADVISORY COMMITTEE ON RESEARCH

J. C. LYSEN, Chairman
Superintendent, Minnesota Braille and Sight Saving School
Faribault, Minnesota

This makes the sixth biennial convention at which our Committee has reported. We have appeared before three A. A. W. B. and counting this one, three A. A. I. B. conferences. It will interest you to know that three members of our Committee, out of a total of nine, have served continuously since this joint research group was organized in 1938. They are Colonel E. A. Baker, Dr. Roma S. Cheek and Joseph F. Clunk. Three other members have served since 1939. They are Robert W. Woolston, William E. Allen, and the reader of this report. Dr. A. L. Brown has been a member of the Committee since 1940, Robert Lambert since 1942, and Dr. Berthold Lowenfeld since 1943.

After a lapse of four years in reporting to the A. A. I. B., there is much to tell. Even so, the report will be made as brief as possible.

Since 1940, the year this convention last met, three research studies have been completed. They are: "Teachers of the Blind: Their Status and Salaries," by Dr. Lowenfeld; "An Analytic Study of Braille Reading," by Pauline F. Eatman; and, "A Study of respective values and services of public school Braille classes and residential classes to determine which plan of educating the blind child is better suited to his needs," by Otto F. Meyer, teacher and field representative, Ohio School for the Blind.

Announcement of the completion and printing of Dr. Lowenfeld's study was made at the A. A. W. B. convention in 1941. This is a 44-page monograph which discusses the status and salaries of teachers in our residential schools. Since this was the first comprehensive study of teachers' salaries in schools for the blind, it was not possible to show any trends. In his foreword to the monograph, Dr. Robert B. Irwin, Executive Director of the American Foundation for the Blind, wrote: "The inadequacy of our teachers' salaries compared with those of public school teachers—makes it imperative that authorities of schools for the blind adopt a decided change in salary schedules if they are to retain well-trained teachers until they acquire sufficient experience to reach their maximum efficiency." Please note: The foreword suggested that factual study be followed by action. Copies of the above-described monograph were made available to schools cooperating in the survey. They can be secured from the Foundation, which has a limited supply on hand.

The second research study to be completed since 1940 was developed as a doctor's thesis at the University of Texas. As already indicated it is entitled "An Analytical Study of Braille Reading." Legal impediments have prevented its being published under the auspices of the Texas School for the Blind. Our Committee will seek to have it printed and distributed at an early date. This study, some 100 typewritten pages in length, is quite technical; several of the conclusions arrived at will be noted now for your convenience: Silent reading is considerably faster than oral reading; good Braille readers move their hands independently in making regressive movements; degree of vision influences significantly reading achievement; two handed readers are the fastest, while right handed readers are swifter than left handed readers.

The third and most recent study to be completed is still in manuscript form. I have the original, typewritten copy in front of me. It is the Ohio study on Braille classes in residential and public schools. It was carried on under the supervision of W. G. Scarberry, Superinten-

dent of the Ohio State School for the Blind, and the guidance of Dr. Charles Scott Berry, Department of Special Education, College of Education, Ohio State University. Our Committee will undertake the publication and distribution of this monograph as soon as possible. Some revising is indicated.

Time will not permit even a brief review in this report. This study represents a tremendous amount of work, covering more than three years. Scores of questions have been raised, which could easily be made the basis for additional studies. The monograph concludes: "It is sincerely hoped that bringing together this collection of pertinent material about residential schools and public day schools for Braille classes will serve the twofold purpose of (1) inducing thought and discussion of ways in which both types of schools can profit from the experiences and practices which others have found decidedly helpful and (2) to encourage further study by individual schools and research as was herein suggested."

A summary of the Ohio study was presented to the convention last evening.

Two new research topics have been assigned by our Committee since this conference last met. The first of these is entitled, "Children's Vocabularies and Braille contractions," and is being carried on at the American Printing House for the Blind by Miss Marjorie S. Hooper, Braille editor. The second study has been accepted as a research project by the Canadian National Institute for the Blind. It concerns "A comprehensive research project in respect to the adaptation of aptitude tests: vocational guidance techniques; specialized job analysis and the preparation of a job dictionary in the general field of employment for the blind."

Our committee received from Miss Hooper a progress report. It came air mail special delivery, and represents a review of three year's work. Miss Hooper states that there is a "considerable difference of opinion among teachers of the blind as to the proper time for the introduction of the contractions and word signs," in spite of the fact that we have had a single embossed system in use in this country since 1918. She adds that, although the American Printing House for the Blind at Louisville follows our specifications set up by the A. A. I. B. and the A. A. W. B. in 1940, it does not necessarily follow that the present system of embossing is the best for the blind student. It will be recalled that the 1940 plan called for embossing Pre-primers and Primers in Braille grades 1 and 1½, according to the demand from the schools; one-side, double-space printing. It stipulated intermediate steps until for Junior-Senior High School material, Braille Grade 2 was specified with interpoint printing.

We have not had as yet in our literature on teaching the blind "exact scientific data which can shed light on the problem of the proper level, or levels, for the introduction of the Braille contractions and abbreviations in Braille reading." Miss Hooper adds, "It is the purpose of the present study, therefore, to attempt to determine by statistical tabulation the placement by reading grades of the individual Braille signs, and their relative usefulness compared one with another."

This study will eventually include the other grades up to and including the sixth. Briefly this is what Miss Hooper is doing. She card-indexes each word as to when it first appears in a series of readers. She also indexes derivatives and varying forms of each word, since many Braille contractions appear chiefly in the suffixes of words in such combinations as "ation," "ally," etc. "I am not confining my study to the regular readers series alone," Miss Hooper informs us. She adds, "I am studying our new arithmetic series, two or three of our new health series, our geography series, etc. This should give enough range to cover the vocabularies which children employ in school grades 1 through 6." Miss Hooper's progress report merits inclusion in the conventions proceedings.

The Canadian study, we'll call it that for the sake of brevity, will be in charge

of Dr. S. A. Saunders, M. A., Ph. D., Colonel Baker informs us. Dr. Saunders, an economist with some 13 years experience in governmental and semi-governmental projects, will have the help of an advisory committee.

Colonel Baker's "progress report" reads:

"In the early summer of 1943, this project was undertaken by the Canadian National Institute for the Blind. Reports indicate that progress has been made in spite of the difficulty in securing student assistance from the University of Toronto under existing conditions. The several phases of this study are being investigated along parallel lines with close integration. At the outset, an Advisory Committee was established, representative of University Departments of Education and Sociology; of industrial engineering and personnel management; and of training and employment services for the blind; with the Director of the Canadian Society of Mental Hygiene, involving the psychiatric and psychological approaches, as Chairman. Aptitude and working tests for the handicapped have been studied and methods practical for the blind are being tested.

"Sub-contract working departments have been developed by the Institute in which a wide variety of detail, machine, and assembly operations is available on which to confirm aptitude tests and to carry out reconditioning procedures. In collaboration with the Department of Psychology, University of Toronto, an exhaustive study of aptitude tests adapted for the sightless is under way.

"A preliminary list of jobs now being successfully performed by the blind has been compiled, and preliminary work in the breakdown of job motions as a basic approach to the job analysis phase of the program has been undertaken.

"While the ground work of this broad research project is being pressed, results and conclusions have not yet reached the stage where a more specific and conclusive report can as yet be given."

As announced to this convention in 1940, the Research Council for Blind Children, New York, N. Y., found it was unable to carry through an assignment entitled, "Research designed to develop a pre-school educational program for the blind." By 1941, the subject had been re-phased to read, "The Training of the Pre-School Blind Child," and assigned to the Michigan School for the Blind, Josef G. Cauffman, Superintendent. As most of you, no doubt know, the Michigan School for the Blind inaugurated in the summer of 1937 a nursery and instructional course for blind babies and their mothers. In commenting on this study Mr. Cauffman has informed our Committee that "it has been most difficult to do anything with this subject in a scientific way because there is so little literature pertaining to it — this is not properly a research problem—it revolves so much about the Michigan experiment. The final draft will cover more territory." A recent letter from Mr. Cauffman indicates that it may not be so very long before this particular monograph is completed. I venture to say that it will prove itself to be one of the top human interest documents of our current times.

Now, ladies and gentlemen of the convention, if you will pull up your chairs, we will make a quick survey of other research subjects which may or may not be on the fire.

Because of a stringent personnel situation, the American Foundation for the Blind finds it necessary to put its project away in moth balls for possibly "the duration," even though considerable work has already been done. Its study is "Research designed to show fields of private and public assistance to the Blind." Dr. Irvin reports that the Foundation has "collected and analyzed the laws of 46 states which have provided by law for state supported programs of services for the blind with a view to determining which types of service are generally recognized as the responsibility of the state." He adds, "Since some of the laws are worded in general terms, we are supplementing this analysis with a study of the

specific activities carried on by state agencies, as presented in their annual reports. Through synthesis of this data we expect to arrive at (1) a definition of those activities which are generally agreed to be the responsibility of public agencies, and (2) a list of activities which are sometimes, but not generally, recognized as public responsibility. With regard to the functions of private agencies, it is proposed that when the analysis of public agencies is completed a similar study will be made of the existing activities of private agencies, as presented in their annual reports."

Perhaps, the most voluminous topic yet assigned is "A survey of charters and statutes governing all agencies engaged primarily in work for the blind in the United States." The completed work will certainly serve as an encyclopedia of information. Dr. Merle E. Frampton, Principal of the New York Institute for the Education of the Blind, has informed us that Benjamin Berinstein of New York City is cooperating closely with the National Society for the Blind in Washington, D. C., and is bringing up to date the material on each State which had been previously prepared. Rapid changes in legislative enactment, both Federal and State, have made considerable revision necessary. The first edition of this painstaking study may be available for our Committee's review by January, 1945, Dr. Frampton states.

Dr. R. S. French, Superintendent of the California School for the Blind, has also been beset by "shorthandedness and the consequent necessity of being on the job constantly with very little leisure for research....." "A Standard Curriculum in a Residential School for the Blind" is the research topic assigned the California School.

"Prevention of blindness developments in the United States," a topic assigned the National Society for the Prevention of Blindness, is stymied by the pressure of present day demands and the temporary loss of volunteers engaged in the project.

Our Committee now has a new study under consideration. I can perhaps best state the problem by quoting from a letter which I addressed to the other members of the Committee under date of April 18, 1944.

"I am interested in securing the.....reactions of our Committee members on the following study, which I am proposing herewith: 'Research designed to show what blind people have done in industry during the present war.'

"It is my thought that this study might be undertaken and financed by an association of manufacturers. With our counselling they could survey the entire field and set up job analysis.

"This would necessitate, I feel, the following procedure:

"1. The initial assignment of the research study to one of our established national organizations.

"2. The reassignment, in turn, of the study to an association of industrialists.

Mrs. Eleanor Brown Merrill, Executive Director, informs us, that:

"The extensive survey of the prevention of blindness activities throughout the United States originally planned by the Society, has been postponed for the duration. However, in recent months information has been collected about outstanding features of state prevention programs through questionnaires addressed to agencies having full-time prevention workers. The questionnaires were sent to 23 official and voluntary state agencies and to 15 voluntary local agencies. Replies were received from 18 state agencies and 9 locals. These limited returns give a reasonably clear picture of the extent to which facilities are available for services, such as,

1. Corrective eye care for the medically indigent.
2. Provisions for a routine vision testing program for pre-school and school age groups.
3. Arrangements for handling special education of visually handicapped school age groups.
4. Provisions for rehabilitation services

to visually handicapped (not blind).

3. Provisions for eye protection and utilization in industry.

Interesting information is also available concerning special projects that are current in a few states. A summary of this material will be published in the near future in 'The Sight-Saving Review'."

"One of our national organizations would be in a strategic position, in that it could call on commissions for the blind in each state to furnish the manufacturer's group with a list of the employed blind. The industrialists could in turn, prepare information and statistics showing what types of jobs are held by the blind, what manual dexterity is required, etc.

"It might be advantageous to determine by interview, what training the employed blind person has had."

Here are some of the reactions from members of the committee:

(1) "I recognize that this study will be very valuable and that it will involve an enormous amount of work. If it can be done in a satisfactory manner it will be an important step forward in knowing what capacities and education the blind need in order to secure employment. It will also give a list of jobs which the blind have successfully performed."

(2) "I.....hope the Joint Advisory Committee on Research can obtain the aid of an association of manufacturers, who with your counselling, could survey the field and set up job analyses. We want to know directly from industries the processes that the blind can most satisfactorily perform and then prepare them definitely in the schools and commissions to fill places that will mean a livelihood for them. Many of our older students dropped out of school and have been successful in earning good money in industrial plants, but they got their jobs only by chance. Your research plan, I am sure, will result in something more definite."

(3) "I would like to say this: (concerning the proposed study) It would have value only if done in a very comprehensive way. Some organizations and agencies—I am particularly thinking of the Office of Vocational Rehabilitation in the Federal Security Agency—must already have considerable material on this problem but a good deal of work will have to be done on both ends, the agencies for the blind as well as industry, if such a study is to really cover the field..... You might perhaps consider giving the study a little different slant by changing the title to something like 'The effect of war time on the employment of the blind in industry.' Such a study would not necessarily entail a complete coverage of the fields, individual by individual, but an evaluation and analysis of the various branches of industry in which blind people are employed."

(4) "Information secured should be developed on a uniform survey report and there are several ways in which it can be developed. More details will be available when your decision is made." This same letter suggests that the National Society for the Blind, Washington, D. C., be considered for this study because of the surveys it has already made and because of the material on industrial placement it has published to date.

With the concurrence of members of the Committee, the assignment will be made as soon as possible.

In our report to the A. A. W. B. convention in 1943, we listed without comment, research subjects still unassigned as originally listed by the Joint Findings Committee in 1938. We are listing these topics again, placing first those subjects, which are definitely assignable and secondly, those which might be called "dubious" because of time and circumstance. Each topic carries a Committee comment.

1. "The construction of a definite educational program adapted to the needs of the sub-normal child." Very desirable. It is possible a master's thesis has been written on this subject. To be checked.

2. "A study of pensions for the Blind." Very desirable.

3. "A careful study of vocations for the blind." Partially covered by the project now under consideration by our

Committee to be entitled, either "Research designed to show what blind people have done in industry during the present war," or "The effect of war time on the employment of the blind in industry."

4. "A study of the border-line mental and sight-saving cases with the view of presenting an adequate practical program for their care." The first-named part of this study, namely, "The border-line mental" field can be absorbed in topic no. 1 just listed. That part of the subject, which reads, "A study of.....the border-line sight-saving cases," is already being studied, as indicated by an announcement in the October, 1943, issue of the Outlook for the Blind. This tells of the formation of a joint committee for "The study of problems of children with severe visual handicaps," representing jointly the National Society for the Prevention of Blindness and the American Foundation for the Blind.

5. "A conspectus of work for the blind in other countries, given according to divisions of service." If assignable, must wait until after the war.

6. "Definite suggestions for the most useful and successful categorical services to the blind, with suggested standards for measurement." A subject which is as wide as it is important. Any agency would hesitate to undertake such a comprehensive study. It would be better to enumerate a few of the services and assign them to organizations that have done outstanding work in that particular category of service.

7. "A study of the local and national relationships of organizations working in the blind areas." This would be a "touchy" subject, but a study might help to clarify the relationships in question.

8. "The construction of teaching loads in standard schools." Question: Does this refer to a study of teaching loads in residential schools for the blind as compared with other residential or public schools?

9. "Research which will lead to the formulation of definite courses of instruction which will provide for greater individual differences among students." This topic seems to contradict itself since a formulation of **definite** courses of instruction, cannot provide for greater individual **differences**. The more definite a course is the less individualization can be achieved. If the word "definite" is omitted, the topic becomes more meaningful.

Members of the Joint Advisory Committee on Research invite herewith suggestions for new research projects. All suggestions will be given careful attention, and where they are found to be worthwhile, an assignment will be sought.

Several years ago, Dr. Roma S. Cheek reviewed three books on research and condensed these to a list of "Suggestions for Research and Social Surveys." The books reviewed are: "The Technique of Social Investigation," by Luther Fry; "Scientific Social Surveys and Research," by Pauline V. Young; and "Your Community," by Joanna C. Colcord. I have brought with me mimeographed copies of that part of Dr. Cheek's summary, which concerns "Suggestions for Formulating Questionnaires." They may be secured from the Secretary-General. Kindly sign or have someone sign the register when securing your copy. Since questionnaires are necessary in the conduct of our profession, let's make them good!

In conclusion, we wish to quote ourselves (A. A. W. B. Report, 1943). "Members of the Joint Advisory Committee on Research take this opportunity to express again their appreciation for the genuine interest shown in their work. It is their hope that research studies initiated by them will promote greater unity of thought and action in the broad field represented by the members of the two organizations, whose joint action brought it (our Committee) into being."

BRAILLE CONTRACTIONS AND CHILDREN'S READING VOCABULARIES

Progress Report

MARJORIE S. HOOPER, Braille Editor
American Printing House for the Blind
Louisville, Kentucky

Time did not permit the presentation of this progress report to the convention. It has been condensed by the simple expediant of omitting all tables. The Joint Advisory Committee on Research recommends a careful reading of Miss Hooper's progress report. It represents three years of hard work thus far, and it promises to be the finest scientific study on the placement of Braille contractions.

Although we have had a single embossed system in use in this country since 1918, there has always been considerable difference of opinion among teachers of the blind as to the proper time for the introduction of the contractions and word signs. There is a wide divergence of opinion as to whether it is best to first teach Braille Grade 1 in beginning reading, or to start immediately with Revised Braille Grade 1½. Many teachers never teach Grade 1 as such, beginning at once with the introduction of the Grade 1½ signs; others prefer to teach the letters, punctuation and composition signs, and simple mathematical symbols first, reserving the learning of the contractions of Grade 1½ to the second year. The adoption of Standard English Braille Grade 2 in 1932 has further complicated the situation, since there is little accord as to the proper reading grade in which to acquaint the child with the Grade 2 signs. Some teachers feel that the system is too complicated for the child below the high school level; others wish to introduce Grade 2 as low as the third school grade.

In 1940 the American Association of Workers for the Blind recommended to the American Printing House for the Blind, as the official schoolbook printery, that the following plan be followed in the embossing of books approved for publication by its Publication Committee:

"a. **In Pre-primers and Primers,** the use of Braille Grades 1 and 1½, according to the demand from the schools; one-side, double-space printing.

"b. **In First Readers and Other First-Grade Material,** the use of Braille Grades 1 or 1½, according to the demand from the schools; interlined printing (i.e., two-side, double-space printing).

"c. **In Second Readers and Other Second-Grade Material,** the use of Braille Grade 1½; one-side, single-space printing.

"d. **In Third Grade to Junior High School Material,** the use of Braille Grade 1½; interpoint printing.

"e. **In Junior-Senior High School Material,** the use of Braille Grade 2, following the interpretations of the rules for Standard English Braille as at present set forth by the Library of Congress; interpoint printing."

At the present time, the above specifications determine the grade of Braille in which a given book may be embossed at the Printing House.

The course of procedure outlined above provides a practical, workable plan from the standpoint of the embosser. It does not follow necessarily, however, that this plan is the most suitable from the standpoint of the blind student. The practices now followed represent in themselves only personal opinion, since the schedule outlined above was in itself based on a survey of the opinion of teachers of the blind made by the Committee on Braille of the A. A. I. B. in 1940. Nowhere in our copious literature on teaching the blind is to be found exact data which can shed light on the problem of the proper level, or levels, for the intro-

duction of the Braille contractions and abbreviations in Braille reading. It is the purpose of the present study, therefore, to attempt to determine by statistical tabulation the placement by reading grades of the individual Braille signs, and their relative usefulness compared one with another.

Before undertaking the compilation of the material for the study, certain rules of procedure were determined. First, it was decided that each individual contraction should be examined separately without regard to its grade of Braille. This course was settled upon since it was found that, although the Braille system progresses from one Braille grade to another, the usefulness of the symbols do not necessarily follow the same pattern. For instance, the words "father" and "mother," which are Grade 2 signs, are among the first words learned by a small child. On the other hand, the word "knowledge," which is a Grade 1½ sign, does not appear in a child's vocabulary—even for reading—much before the sixth school grade.

Another problem was posed by the differences in the rules of syllabication as between Revised Braille Grade 1½ and Standard English Braille Grade 2. Since Grade 1½ does not permit the overlapping of syllable division in the use of contractions, while Grade 2 follows the rules of sequence, it was found that there would be some instances where Grade 1½ signs might prove more useful under Grade 2 rules than those of Revised Braille. On the other hand, often a Grade 1½ sign would be discarded in favor of another sign, either grade 1½ or 2, by the observance of the grade 2 rules, as in the case of the word "mother" which in Grade 1½ is written **"moth|er"** which in Grade 2 the word has its own special Braille sign. For this reason, notice was made of the usefulness of the signs according to both rules of usage.

As a basis for the tabulations, the following recognized lists of graded vocabularies were employed;

STONE'S GRADED VOCABULARY FOR PRIMARY READING by Clarence R. Stone. (Webster Publishing Co., St. Louis, 1941).

A STUDY OF THE VOCABULARY OF CHILDREN BEFORE ENTERING THE FIRST GRADE by the Child Study Committee of the International Kindergarten Union. (International Kindergarten Union, Washington, 1928).

A READING VOCABULARY FOR THE PRIMARY GRADES; revised and enlarged, by Arthur I. Gates. (Teachers College, Columbia University, New York, 1935) .

SPOKEN VOCABULARLY OF CHILDREN UP TO AND INCLUDING SIX REN UP TO AND INCLUDING SIX YEARS OF AGE, by Ernest Horn. (24th Yearbook of the National Society for the Study of Education, Part I, Chapter VII, 1925, as given in "A Combined Word List" compiled by B. R. Buckingham and E. W. Dolch—Ginn and Company, Boston, 1936).

A TEACHER'S WORD BOOK OF 20,000 WORDS, by E. L. Thorndike. (Teachers College, Columbia University, New York, 1931).

A BASIC WRITING VOCABULARY, by Ernest Horn. (University of Iowa Monograph in Education, First Series, No. 4, April 1, 1926, as given in "A Combined Word List", compiled by B. R. Buckingham and E. W. Dolch—Ginn and Company, Boston, 1936).

In addition to the above, an original tabulation was made of the vocabularies of twenty-one reading series printed in Braille and in use in the schools and classes for the blind at the present time. The twenty-one series of readers, and the individual titles examined, follow:

ALICE AND JERRY BOOKS (Reading Foundation Series). O'Connell, et al. Row, Peterson, and Co., Evanston:

READINESS - PRE - PRIMER—HAPPY DAYS. 1938.

FIRST PRE - PRIMER—RIDES AND SLIDES. 1936.

SECOND PRE - PRIMER—HERE AND THERE. 1936.

PRIMER—DAY IN AND DAY OUT.

1936.
1ST READER—ROUND ABOUT. 1936.
PARALLEL FIRST READER—ANYTHING CAN HAPPEN. 1940.

BRAILLE READING SERIES. Ellis, et al. N. Y. I. E. B., New York, 1941:
PART I—SALLY AND TIM
PART II— FUN WITH SALLY AND TIM
PART III—SALLY AND TIM AT WORK AND PLAY.

DAILY LIFE ARITHMETIC SERIES. Buswell, et al. Ginn & Co., Boston, 1937:
JOLLY NUMBER TALES: Book I.

DEMOCRACY READERS. Nemec. Macmillan Co., New York, 1940:
PRIMER—SCHOOL FRIENDS
FIRST READER — LET'S TAKE TURNS.

EASY GROWTH IN READING SERIES. Hildreth, et al. John C. Winston Co., Philadelphia, 1940:
PRE - PRIMER, LEVEL ONE—MAC AND MUFF.
PRE - PRIMER, LEVEL TWO—THE TWINS, TOM AND DON.
PRE - PRIMER, LEVEL THREE—GOING TO SCHOOL.
PRIMER, LEVEL ONE—AT PLAY.
PRIMER, LEVEL TWO—FUN IN STORY.
FIRST READER, LEVEL ONE—I KNOW A SECRET.
FIRST READER, LEVEL TWO—GOOD STORIES.

ELSON BASIC READERS (Life-Reading Service). Elson, et al. Scott, Foresman & Co., Chicago, 1930:
PRE - PRIMER.
PRIMER
BOOK ONE.

FRIENDLY HOUR SERIES. Leavell, et al. American Book Co., New York, 1935:
PRIMER—BEN AND ALICE
BOOK ONE—PLAYMATES

GUIDANCE IN READING SERIES. Storm. Lyons & Garnahan, Chicago, 1936:
PRE - PRIMER—NIP AND TUCK
PRIMER—BOB AND JUDY
BOOK I—GOOD TIMES TOGETHER.

HAPPY HOUR READERS. English and Alexander. Johnson Publishing Co., Richmond, 1935:
PRIMER—JO-BOY (Not Brailled, but counted).
FIRST READER—GOOD FRIENDS.

HEALTH STORIES (Curriculum Foundation Series). Towse, et al. Scott, Foresman & Co., Chicago, 1933.
BOOK ONE.

NATURE ACTIVITY READERS SERIES. Edwards and Sherman. Little, Brown & Co., Boston, 1931:
BOOK I—THE OUTDOOR LAND.

NEW CITIZENSHIP READERS. Ringer, et al. J. B. Lippincott Co., Philadelphia, 1940:
PRE - PRIMER—A HAPPY DAY.
PRIMER—DAVID AND JOAN.
BOOK I—CITY AND COUNTRY.

NEW PATHWAYS IN SCIENCE. Craig, et al. Ginn & Co., Boston, 1940:
BOOK I—WE FIND OUT.

NEW SILENT READERS (A Basal Activity Series). Lewis, et al. John C. Winston Co., Philadelphia:
PRE - PRIMER—TOTS AND TOYS. 1931, 1936.
PRIMER—PETS AND PLAYMATES. 1931, 1936.
BOOK I—GROWING UP. 1931.

NEW WORK - PLAY BOOKS. Gates, et al. Macmillan Co., New York, 1939:
PRE - PRIMER—OFF WE GO.
PRIMER—JIM AND JUDY
BOOK I—DOWN OUR STREET.

OUR ANIMAL BOOKS (A series in humane education). Sondergaard, et al. D. C. Heath & Co., Boston, 1937:
PRIMER—FUZZY TAIL.
BOOK I—SNIFF.

ROAD TO SAFETY SERIES: rev. and enl. Buckley, et al. American Book Co., New York, 1938, 1942:
A—PRE - PRIMER—AWAY WE GO.
B—PRIMER—HAPPY TIMES.
C—BOOK I—IN STORM AND SUNSHINE.

SAFE AND HEALTHY SERIES. Andress, et al. Ginn & Co., Boston, 1939, 1941:
BOOK I—SPICK AND SPAN.

SCIENCE STORIES (Curriculum Foundation Series). Beauchamp, et al. Scott,

Foresman & Co., Chicago, 1933:
BOOK I.
WONDER-STORY BOOKS (Reading Foundation Series). Huber, et al. Row, Peterson & Co., Evanston, 1938:
FIRST READER—I KNOW A STORY.
WORK-PLAY BOOKS. Gates and Huber. Macmillan, New York, 1930:
PRIMER—PETER AND PEGGY.
1ST READER—ROUND THE YEAR.

This study was undertaken in order to verify the placement of the commenest inflectional forms, such as the derivatives formed to give the endings **ed, en, er, est, ing,** etc., which contain important contractions in the Braille system. An examination of the available published graded vocabularies showed that these forms were not tabulated.

In order to save an endless amount of time, the compiler has taken note of only those words which contain Braille contractions. This has meant, however, that the tabulations could be done only by someone well-acquainted with the Braille system and has necessarily reduced the amount of aid in tabulating which could be employed.

To further reduce the tediousness of tabulating, only one reading grade at a time is being studied, so that Braille signs for which the reading levels have been determined may then be dropped from further study. For this reason, the study can be continued progressively over the several school grades until the entire 185 contractions nd abbreviations of Standard English Braille can be placed. In this connection, up to the present time only the signs for the first reading grade, including pre-primers, primers, and first readers, have been tabulated. This part of the work, however, will determine the placement of a major part of the Braille symbols. Further, the balance of the study should proceed much more rapidly than the part just completed, since the independent study of Braille readers will not be necessarily beyond the first grade. The common inflectional forms are definitely placed within the first grade, and the published graded vocabularies include most of the more advanced derived forms, such as **ation, ity, sion, tion,** etc. On the other hand, contractions which appear to be only slightly useful in the first reading grade will be tabulated again with later reading grades until their true reading level is determined.

In placing Braille signs, two points have been considered, namely, the proper reading grade level and the frequency of occurence. Reading grade placement is shown in the Ston, Kindergarten Union, and Gates lists, and Horn's Vocabulary of Six-year-olds; the frequency of occurence, or usefulness, is shown in the Kindergarten Union, Gates, and Thorndike lists, and Horn's Adult Writing Vocabulary. The Kindergarten Union List and Horn's Vocabulary for Six-year-olds give only words which can be presumed to be familiar to children on entering the first grade; the Gates List is presumed to cover Grades I and II, and gives placement on the basis of the frequency of occurence by thousands and the first and second 500 of each thousand; the Stone list gives grade placement only. In addition, the Kindergarten Union List gives the hundred of the first 500 in which any word occurs. The figures given for the Thorndike List and Horn's adult Writing Vocabulary also indicate frequency of occurency by thousands.

In compiling the information about the Braille signs, words containing contractions were typed on individual 3" x 5" cards. Immediately below each word was rewritten accordingly both Braille Grades 1½ and 2 usages. The grade placements for the word according to each vocabulary list were then listed on the card, as were the placements for the original study of the Braille Reader series. These cards were filed alphabetically for ready reference as the study of each list was made. It was the accumulation of this material which has taken hundreds of hours of work.

As noted above, when compiling the information about each word, note was made of only those words which appear in books for the first grade—pre-primers,

primers, and first readers. On the other hand, words which might be given in only one of the vocabulary studies were listed. This helped to show frequency of incidence.

When all the information had been compiled on the cards, the words were then relisted alphabetically on long sheets according to the Braille contractions. Each contraction was given a separate sheet, and all of the words in which it appeared were listed alphabetically thereon, with the information and rating from each of the graded vocabulary lists. Thus a word containing four Braille contractions would appear on four different lists or sheets.

Rearrangement of the contraction sheets showed that the following 157 Braille contractions appear in books of the first school grade: (Table omitted here).

The modal averages for each contraction are now being compiled. These averages are now being made separately for each of the published vocabulary lists forming the basis of the study (See the individual columns in Table IV, page 10). For those contractions which may be used as both whole-word and part-word signs, two modes are figured, one for the whole-word and the other for the part-word usage.

The modal averages for all of the contractions have not yet been determined. By means of simple inspection, however, the 157 contractions appearing in books for the first grade may be classified roughly as follows: (Table omitted here).

When the compilation of the information for all of the Braille contractions has been completed, and the grade placement of all the Braille contractions and their true modal averages have been determined, a correlation should be made according to the rules of Braille usage, formation of the signs, etc., with a view to giving exact statistical data as a basis for the preparation of a manual for teaching Braille which would introduce the Braille contractions and abbreviations in proper progression according to usefulness. The preparation of such a manual, however, should very probably be the work of an experienced teacher of Braille acquainted with the difficulties of teaching individual contractions and also with the teaching aids to assist in the learning process.

REPORT OF THE LEGISLATIVE COMMITTEE OF THE AMERICAN ASSOCIATION FOR THE INSTRUCTION OF THE BLIND

GABRIEL FARRELL, Chairman
Director Perkins Institution and Massachusetts School for the Blind

I have the honor to present the report of the Legislative Committee of the A. A. I. B. for the Biennial, June 30, 1942 to June 30, 1944.

Although a member of this committee for several years, my appointment as chairman was received from the president on October 5, 1942. Members of the committee at that time were Messrs. Farrell, Frampton, Joice, and Settles; Mr. Bledsoe, former chairman, having retired some time previously. On October 7, 1942, Francis M. Andrews, of the Maryland School, was appointed to take Mr. Bledsoe's place. On February 28, 1943, Dr. Settles was succeeded by G. E. Lineberry, of the North Carolina School, and on April 9, 1943, A. G. Cowgill, of the Pennsylvania Institution, replaced Dr. Frampton. The committee now consists of the Messrs. Andrews, Cowgill, Joice, Lineberry, and the Chairman.

At the time of my appointment, considerable discussion was centered about HR 484, the so-called Barden Bill, and President Woolston urged me to take immediate action regarding this legislation. A letter was sent on October 5,

1942, to all members of the committee telling of my appointment and stating my personal views. I informed the members of the general meeting planned in Washington for October 14 to discuss this legislation so that a united front representing the blind might be presented at the Congressional hearing scheduled for the following day.

Members of our committee present at the Washington conference were: Mr. Andrews, Dr. Frampton, and myself. It is not necessary to revive the discussion regarding the so-called long and short amendments, but it will suffice to say that in those conferences, a large committee was appointed to formulate a program for the Congressional hearing. As there was not time to draft a new amendment, it was agreed that certain principles be presented at the hearing with the request that they be incorporated into the proposed legislation. The three members of our committee present approved these principles, and at the Congressional hearing I made a statement to that effect. Copies of both the principles and the statement are available.

When the 77th Congress adjourned without passing the Barden Bill and several other bills in which we were interested, I wrote to members of the committee on December 31, 1942, asking for suggestions regarding meetings and the functioning of our committee. My own proposal was that we seek to have a joint meeting of the two committees on legislation and the two committees on the care of the war-blinded, of the A. A. I. B. and A. A. W. B. respectively, because at that time provision for the war-blinded was included in the Barden Bill.

On January 7, 1943, I learned that Colonel Watts was calling a meeting of the A. A. W. B. Committee on Legislation to be held in the Hotel Continental in Washington on Tuesday morning, January 12, to consider HR 699, which was introduced in the 78th Congress on January 6 by Congressman Barden. In addition to an enlarged program of rehabilitation, this bill made provision for the war-blinded under the Veteran's Administration. A rush notice was sent to the members of our committee urging their attendance if possible. None but the chairman was able to be present. On January 15, 1943, a report of what happened at the meeting was sent to the members of the committee.

In February, 1943, the A. A. W. B. Board of Directors passed a resolution favoring a joint legislative committee between the two associations, and got in touch with President Woolston of the A. A. I. B. President Woolston wrote to me on February 25, 1943, "Mr. Salmon and I are asking you and Mr. Watts to confer and call a meeting of the members of your respective legislative committees for the purpose of electing someone to serve as chairman on a single joint legislative committee representing the two associations." Under this order, Mr. Watts and I arranged for a meeting of our respective committees in Washington on Tuesday, March 23, 1943. Messrs. Andrews, Frampton, Joice, Lineberry, and the chairman were present. After careful consideration which lasted throughout the day, a plan for joint action of the committee was adopted. Your chairman was elected chairman of the joint committee and Mr. Alfred Allen of the A. A. W. B. was elected secretary. A statement regarding this plan was mailed to members of our organization on April 7, 1943. The plan was further described in the May issue of the OUTLOOK FOR THE BLIND.

Under this plan, it was agreed that the joint committee would meet regularly at some time in January each year, and at the time of the biennial convention of each association. Special meetings could be called as and when needed. A sub-executive committee consisting of the chairmen of the two committees, Dr. Farrell and Colonel Watts, and Dr. Irwin of the Foundation, was appointed to act between meetings, and to take immediate action when and if this was found necessary. At that time we had before us a summary of twenty-six different bills

then pending in Congress regarding the blind.

According to the scheduled plan, the next meeting of the joint committee was held at Columbus, Ohio, on July 12, 1943, at the time of the A. A. W. B. Convention. Representing the A. A. I. B. were Mr. Cowgill, Mr. Lineberry, and the chairman. At this meeting it was reported that the Barden Bill covering extension of rehabilitation services for civilians, under the Federal Security Agency, and the Clark-Walsh Bill providing for the retraining of service men, under the Veteran's Administration, had both been enacted into law. Measures were discussed to assist the states in preparing their plans under the Barden Act. Attention was also called to S 1161, the Wagner, or so-called American Beveridge Plan, and Mr. Glen Leet of the American Foundation outlined that legislation for the benefit of the committee.

A special meeting of the Sub-Executive Committee was held in New York City on October 6, 1943, consisting of Mr. Salmon representing the A. A. W. B., Dr. Irwin, the Foundation, Mr. Allen, Secretary, and Dr. Farrell, Chairman, representing the A. A. I. B. The meeting was called because of the regulation which seemed to jeopardize the leadership of the State Commissions for the Blind. The main portion of the Barden Act provides for "administration, supervision, and control," but the amendment delegating the portion of the bill pertaining to the programs for the blind to State Commissions includes the word "administration" only, and there were some who thought that that gave authority to the State Boards of Vocational Education to exercise "supervision and control" over the State Commissions. At this meeting, Miss McKay outlined some of the provisions of the Wagner Bill to amend the Social Security Act to form a unified Public Assistance Program. This bill revokes Title X. A full report regarding this meeting was sent to members of the A. A. I. B. Committee.

The next regular meeting of the joint committee was held in Washington on January 13, 1944. Members representing the A. A. I. B. were Mr. Andrews, Mr. Cowgill, and the chairman. Election of officers was called for and Dr. Farrell was re-elected chairman, and Mr. Allen, secretary. Mr. Salmon had replaced Colonel Watts as chairman of the A. A. W. B. Committee. Dr. Irwin extended his resignation as a member of the committee and it was accepted with regret, with the understanding that Dr. Irwin would continue to work with the committee and give the joint committee the benefit of his services of the Foundation which have been so important in the proceedings up to date. At the morning session, Mr. Michael J. Shortley, of the Office of Vocational Rehabilitation, addressed the meeting and many inquiries were made regarding the development of the program under the Barden Act. In the afternoon, Miss McKay, of the American Foundation Staff, summarized some of the main points in the Wagner Bill. The committee went on record as approving the retention of Title X.

During the biennial, the committee has read, studied, and given consideration to 37 Bills in the Senate, and to 54 Bills in the House. Few of these ever reached the floor of either House, but all had to be studied. While mention has been made in this report of only a few bills, others of importance, were approved and supported, such as the exemption of $500 on the Income Tax, the increased appropriation for Talking Books, and provision for the purchase of guide dogs, which was amended to include mechanical and electronic equipment for aiding blinded veterans in overcoming their handicap.

Our committee has had no separate meetings beyond those described chiefly because not much legislation pertained to schools alone. The A. A. W. B. Committee has met separately, and it is within the right of our committee to do the same when there is special legislation concerning our area.

In conclusion, a few words may be said in regard to the function of the commit-

tee. The first intention of joint activity was to try to present a united front at Congressional hearings, and also to have one group which would be considered representative of the entire field. Certain difficulties seemed to present themselves in the way of achieving this objective. There are several established organizations for the blind which for years have formulated and sponsored bills and have tried to direct legislation and they are not willing to give up their right of free action. We respect their feelings and are not seeking unity through coercion.

It is our recommendation that, hereafter, our committee act jointly with the Legislative Committee of the A. A. W. B. in giving consideration to all legislation in which we have mutual interest, and also to work separately on legislation which affects our respective areas. All national legislation which comes to our attention should be studied carefully and our committees should express approval or disapproval. It is hoped that our appraisal of different bills will command such respect and approval by us will be so valued that organizations preparing to present legislation will want to be assured of our support. We also hope that we can establish a prestige which will make legislators want to know if legislation has our approval or disapproval. It seems to us that in this way our committee can best serve our respective organizations so widely representative of our people and our programs and at the same time not infringe on the rights of other organizations.

A HANDICAP ALLOWANCE FOR THE BLIND

ROBERT B. IRWIN
Executive Director, American Foundation for the Blind

It has long been felt in this country that the needy blind should be given special consideration and not be left entirely to such relief as they might receive under the poor laws of the community. Special financial aid to the blind was provided by the City of New York as early as 1866, and the State of Illinois granted a pension to the blind in 1903. Other states followed this example so that by 1935 twenty-nine states and the District of Columbia had made provision for special or categorical aid to the blind. Though the laws usually set up definitions of eligibility in terms of maximum income, public opinion never demanded much care in the administration of these state laws beyond proof of blindness.

The Social Security Act, Title X of which provides financial aid to the needy blind, passed Congress in 1935. This Act lays down a certain pattern for state administration of relief to the blind. States which conform to this pattern receive a reimbursement from the Federal government of 50 per cent of their expenditures for relief paid, not exceeding $40 a month in any individual case. Most of the states accepted this pattern. In some states, however, public feeling was so strong that the Federal aid granted the blind is a mere subsistence allowance to the destitute, that these states have elected to continue with their own state pension plans which are of benefit to a larger proportion of blind people. This action was taken in spite of the fact that in doing so they had to forego receiving millions of dollars in Federal money.

For several years only minor amendments have been made to the law. The demand for general revision, however, has become so insistent that it is probable hearings on some of the proposed amendments will be considered by committees of Congress during the next twelve months. Any suggestion of changes in the Act arouses a hope among blind people that it will be modified to meet their needs more realistically.

Under Title X grants for the relief of the blind have been generally larger than

under the old state relief laws. In spite of this fact, dissatisfaction among the blind is greater than formerly. This dissatisfaction grows in part out of a good old American resentment against a situation where some individual has the power to determine for the balance of the blind person's life how much he needs to live on. Blind people also feel that the agencies administering relief do not adequately recognize their special needs. The operation of the budgetary deficiency principle of relief administration, through which the financial needs of a blind person are determined, and the difference between his income and his total budget met from public funds, has seldom given due weight to the requirements growing out of the special expenses of blindness. Although enlightened social workers have endeavored in a small way to meet the special needs of the blind through a "broad" interpretation of the word "needy", taking into account in a measure some of the peculiar requirements of the blind, they have been limited, first, by the construction placed on the language of the Social Security Act, which seems to assume that the requirements of a needy blind person are very much the same as those of a needy seeing person; and, second, by the amount of funds available.

The basic elements of relief—food, clothing, and shelter—fall far short of meeting the needs of blind people. Blindness not only limits a man's earning power, but—what is quite as important—it also deprives him of freedom of action. Some of this freedom of action may be purchased, but the average blind person can do this only by giving up other things essential to his well-being. In other words, in order to buy what the seeing man has **free**, through his God-given sense of sight, the blind person must make sacrifices which seeing people in the same economic situation are not called upon to undergo.

The time has come to cease trying to meet the needs of the blind within the restricted framework of Title X of the Social Security Act. In addition to a provision for meeting the substantial needs, another should be made providing the blind with a special handicap allowance designed to release them from some of the fetters which lack of sight imposes. This handicap allowance should be granted to blind people whose incomes are far above what is usually conceived to be the relief level for only the opulent find it possible to purchase what they require in the way of occasional guide service, occasional reading service, special equipment, as braille typewriters, typewriters, etc.

This is in accord with general public opinion as indicated by the fact that state referendums have placed upon the statute books by astounding majorities pensions —however inadequate in amount—for blind persons with incomes substantially above the mere subsistence level. For example; Missouri grants a pension to any blind person having an income of less than $900 a year. Pennsylvania grants a pension to any blind person having an income which combined with his pension does not exceed $1,200 a year. Bills which have been introduced into Congress by prominent members of that body reflect the same recognition of the fact that financial aid should be given to blind people who already have incomes above the subsistence level. Senator McNary sponsored a bill granting aid up to $50 a month to any blind person having an income which combined with his relief does not exceed $1,200 a year. Congressman Voorhis of California is sponsoring a bill giving each state the exclusive right to adopt its own interpretation of the phrase "needy individuals who are blind" in connection with the administration of aid to the blind under Title X of the Social Security Act. The object of this proposal is to permit the states to make grants to the blind under any definition of need they see fit, and still receive Federal matching of funds.

The time has now come to completely revise the Social Security Act as it relates to the blind. Title X of this Act resem-

bles in many particulars Title I, which provides aid to the needy aged. In both programs grants are made on the basis of individual need. However, in the case of the aged the authors of the original Act set up also a contributory insurance provision, known as the Old-Age and Survivors Insurance plan, by which wage earners who reach the age of 65 and give up work, become entitled to old-age insurance benefits for themselves and their dependents, as a matter of right, regardless of their other resources. It was calculated that as more and more workers became entitled to these old-age insurance benefits, the number of aged persons who would need assistance under Title I (aid to the aged) would become less, until eventually the program of old-age assistance would no longer be needed. No corresponding plan for insurance against blindness was provided. This omission should now be corrected. An insurance plan for the blind, however, should be adapted to the peculiar problems of blindness, not merely copied from the Old Age and Survivors Insurance plan.

One of the points on which adaptation is needed has to do with the employment of persons who are entitled to insurance benefits. In the case of the aged, the Act was formulated in such a way as to discourage persons past 65 from engaging in paid employment by reducing the benefits in proportion to the amount earned by the beneficiary. In the case of the blind, however, many of whom are young and employable, it is desirable to encourage them to work. While it will probably be necessary to reduce the benefits as the earning power of a blind person increases, this reduction should not be equal to the amount of earnings. Otherwise there is no cash incentive to work. The reduction should not begin immediately but after a blind workman has earned a given amount, say $20 a month. After that the deduction should be only a portion of the amount, perhaps 50 cents of each dollar of wages over $20. This is the more important because newly-blinded persons often have little confidence in their ability to produce. The total reduction in earnings should never be equal to the total amount of benefits as a balance should be left in the benefit allowance to place a blind person on something like parity with his seeing associates by giving him funds in addition to his earnings which he may use in meeting the special costs of being blind.

How much this should be is difficult to determine. A blind person's expenditures for this purpose depend largely upon what he can afford to spare from his income without depriving himself of other vital necessities. In drafting an amendment to the income tax law allowing for this situation, members of Congress agreed that $500 a year for the special expenses of blindness is a fair average amount. Certainly in any annuity plan for the blind, this allowance should not be less than $20 a month. Five hundred dollars a year would be much more nearly adequate.

There are three groups of people who should be considered in making an overall plan for financial aid to the blind:

1. Those wage earners who will lose their sight in the future;
2. Those adult non-wage earners who will lose their sight in the future; and
3. Wage earners and adult non-wage earners who have already lost their sight.

An additional pay-roll tax averaging less than a half cent per working day to be divided between the employer and the employee would meet the cost of providing a primary benefit of $40 a month to employees in covered occupations who lose their sight in the future. These funds could be merged with the Old Age and Survivors Insurance fund and be administered by the Social Security Board.

A similar benefit should be paid to **non-wage earners** over 21 years of age who lose their sight in the future. The cost of this might be met by appropriations from the general funds of the United States Treasury into the Old Age and Survivors Insurance fund.

Since non-wage earners are for the

most part dependents of wage earners, an alternative and equitable plan for financing the coverage of the first two groups would be to levy a payroll tax of 2 cents per working day on all wage earners—to be divided equally between the employer and employee.

These groups will be diminishing in number as three-fourths of the present blindness could have been prevented had proper steps been taken at the right time. Prevention of blindness is becoming much more effective, and the next generation will see relatively few blind people.

This plan will take care of the people who become blind in the future. What disposition can be made for those who are already blind and for whom the government has not made adequate provision? It is not their fault that society has neither prevented their blindness nor given them a handicap allowance which would place them on something like an equal footing with their seeing fellows instead of leaving them dependent upon the provisions of Title X. I would suggest that as has been done to a limited extent with the aged, all persons over 21 years of age who are blind as of a given date, be treated as if they had been fully covered by insurance. The cost of this should be met by a special appropriation into the Insurance fund from the general funds of the Federal government. As the years go by, this group will gradually disappear. The generous and understanding attitude of the American public as expressed by their lawmakers of late indicates that a thoroughly rational and comprehensive plan for simplifying the problems of the blind people of this country would meet with a sympathetic reception in Congress. It would make it unnecessary for friends of the blind to continue appealing for further special legislation in their behalf.

There is one source of revenue which some feel should have long since been diverted to the welfare of the blind. I have reference to the Federal automotive tax. The automobile has made it practically impossible for most blind people to get about alone. On the other hand, it has accentuated the seeing man's freedom of action. I would propose that an amount equal to this tax be diverted to meet this insurance against blindness. There would be a poetic justice also in diverting to this purpose an amount equal to the excise tax on electric light bulbs. The Federal automotive tax and the tax on bulbs combined would in normal times meet the cost providing an annuity of $40 a month to all the men and women of this country who are now blind.

SUMMARY

Special grants and aid to blind people have long constituted a part of the fiscal policy of the states. The Social Security Act passed by the Federal government in 1935 encouraged this practice by matching from Federal funds on a dollar for dollar basis financial aid to the blind provided by the various states. This was done on condition that the states conform to a Federally-prescribed plan. Blind people have not been satisfied with the administration of the Social Security Act because they feel that those administering it do not give due consideration to the special expenses growing out of blindness. What is needed is a handicap allowance for the blind which will enable them to meet these special expenses. What is also needed is an insurance against blindness operated similarly to the Old Age and Survivors Insurance plan. This should differ from the Old Age plan, however, in several respects:

1. It should encourage not discourage blind people from working;

2. Deductions from the benefit allowance should be less than the earnings of the beneficiary;

3. After all deductions have been made, there should be a balance left remaining in the monthly benefits to meet the special expenses of blindness.

The plan should cover all blind adults, and the amounts paid to persons other than wage earners in covered occupations should be made up by appropriations

from the general funds of the U. S. Treasury into the Insurance fund. The Federal automotive tax and the electric light bulb tax in normal times would yield sufficient to meet this appropriation.

STATES WHICH HAD SPECIAL RELIEF LAWS IN 1935

Arkansas	Indiana	Minnesota	Ohio
California	Kansas	Missouri	Oklahoma
Colorado	Kentucky	Nebraska	Pennsylvania
Connecticut	Louisiana	Nevada	Utah
Florida	Maine	New Hampshire	Washington
Idaho	Maryland	New Jersey	Wisconsin
Illinois	Massachusetts	New York	Wyoming
Iowa			

REPORT OF THE COMMITTEE ON CERTIFICATION OF TEACHERS OF THE BLIND

G. E. LINEBERRY, Chairman
Superintendent, North Carolina School for the Blind

The Secretary of the Committee on Certification of Teachers has turned in a report on the work since the last meeting of the A. A. I. B., which is as follows:

RECEIPTS:

June 2, 1940	Cash on hand	$ 74.00
	124 Applications @ $1.00	124.00
May 13, 1940	Printing 2000 applications and 1500 certificates	26.31
	Express on above	2.77
May 17, 1940	Michigan Surety Seal	3.50
May 27, 1940	Postage	9.00
	1 set pressboard guides	.77

DISBURSEMENTS:

	1 box wagemaker folders	1.16
	1 box gold seals	.16
	2 boxes ledger flags	1.00
June 29, 1940	Stenographic service	16.65
July 23, 1940	200 mailing tubes @ 2½¢	5.00
July 23, 1940	1 box wagemaker folders	1.16
	Personal Service	25.00
July 29, 1940	Harold E. Owen (remitted $2.00)	1.00
July 31, 1940	Labels for mailing tubes	.25
Aug. 6, 1940	2 boxes gold seals	.32
Sept. 16, 1940	Postage	6.00
Nov. 8, 1940	Personal Service	23.95
Dec. 6, 1940	2 boxes gold seals	.32
Mar. 25, 1941	Personal Service	25.00
Dec. 22, 1941	Personal Service	25.00
Dec. 22, 1941	Postage	.68
July 6, 1943	Telegram to New York — R. L. Shayon	.53
Dec. 23, 1943	Refund to Margielea S. See	1.00
		176.53
	Balance on hand June 23, 1944	$ 21.47

The charges by the Secretary are mainly for stenographic help, letters to colleges, etc., regarding credits of applicants and correspondence with applicants. His report covers the work and gives you the financial statement since our last meeting, and we hereby submit same as our report. We do not recommend any changes at this time.

Respectfully submitted

"HOW SHOULD WE MEET SOCIAL LIFE NEEDS IN RESIDENTIAL SCHOOLS FOR THE BLIND"

JOSEPH J. KERR, Principal Teacher Boys' School
Pennsylvania Institution for the Instruction of the Blind

It is indeed an honor and a privilege to be invited to lead this discussion. Although I have been in work for the blind a short time only, this subject has interested me greatly. It is my purpose in presenting this paper to mention briefly some of the social activities at Overbrook, and I trust that each of you will feel free to participate in a general discussion of the social problems which confront us today in residential schools.

Our first duty is to provide an adequate education that is planned especially to meet the need of each boy and girl enrolled which will enable him to fill his individual niche in the world of tomorrow. Each student must be equipped physically, mentally, morally, and socially. The mere mention of the word "socially" brings to mind the many problems which those in authority in co-educational schools for the blind face.

Our boys and girls must be taught to live amicably with fellow-students at school, with relatives at home, and with friends in their communities, which at times is a rather difficult undertaking. They must acquire certain social graces and learn self control; some of these things have been accomplished at Overbrook. One of the highest compliments given our students during this year came from a dispatcher at the Circus, who told me that of all the thousands of Philadelphia School children in attendance on that particular day, our group of sixty-five boys and girls was the best mannered of any group present.

Social problems in schools for the handicapped are closely allied with those in other schools. In each case, whether handicapped or not, the social programs and activities must be guided and directed with great care and consideration; at Overbrook we have sought in many ways to lead the student body and to place before the group opportunities for leadership into proper channels. There is an active Boy Scout Troop, a Girl Scout group, a MacArthur Club for the older boys to promote the sale of stamps and bonds; there are clubs organized to collect paper and flatten cans for salvage purposes, and Junior Red Cross groups. There was an anagram party, as well as a play, given by the boys and girls, admission consisting of the purchase of a stamp or bond. Six dances were scheduled throughout the year at which partners were selected by the faculty for some of the numbers, while others were "free dances" which enabled the boys to choose their own partners. The Chorus of some forty members has been entertained in a church where a concert was given; Philadelphia Orchestra programs and other places of amusement have been attended. The Senior Class has conducted sales to raise funds for class expenses, which closed with a dance. The Philodrama Club has presented programs at the school and in many clubs of the City. We have also had quite a few sport activities. Wrestling and track meets have been interscholastic as well as intramural; baseball and football teams have been selected and the competition has been keen. The pupils go out to Sunday School or church each Sunday, visit in the homes of friends, and everything is done to develop their inner resourcefulness and ability to become well adjusted persons in this confused world at war.

I now open the meeting for discussion of this situation, and anticipate receiving help from the suggestions which will be offered.

What about parties—should they be planned by the pupils?

Should they be held at certain times or should they come at any time?

Should we have dances? How much freedom should be allowed the boys and girls together?

SOME SUGGESTED CHANGES IN INSTRUCTIONAL PROCEDURE

W. G. SCARBERRY
Superintendent, Ohio School for the Blind

Read by Dr. Quimby

Since the United States entered the World War and intensive training began in preparing the young men and women of our country for participation in the world conflict, much has been said and written about G.I. training. No doubt rapid advancement in certain subjects has been made by groups subjected to this type of teaching and splendid results have been accomplished. There are several reasons for such accomplishment, among them being incentive, complete control of the learner's time, and the elimination of all "frills" which seem to attach themselves to almost any course unless those in charge are constantly alert as to what are fundamentals and what are "frills". Perhaps part of the rapid advance of men and women under G.I. instructional methods is also due to the age and grade level upon which it is conducted. In our opinion the old truism still stands: "There is no royal road to geometry." We do not see how it is possible for a pupil to become an expert violinist in a short time even though he may work long hours and be under expert guidance. The same statement would hold true regarding the accomplishment of a vocal student. In other words, we believe that laws of learning are constant and that any rate in learning depends upon good teaching and intensive study by the pupil together with a proper selection of subject material; therefore, in the academic field in our schools for the blind, it seems to us that the changes that are being made or should be made must come through critical examination and proper evaluation of courses and efficient use of time on both the part of the teacher and the learner. We cannot eliminate fundamental subjects from our academic curriculum. We must have the "tools" of learning, as reading, writing, and arithmetic. We cannot eliminate history, geography, mathematics, English, economics and sociology and certain other fundamental subjects. It would seem, therefore, that we must study our courses carefully and eliminate all "frills" and unnecessary content, and concentrate upon such fundamentals as are needed in our present day economic setup and most certainly point our work toward teaching our pupils the American way of life. No doubt you may be thinking that this is what we should have been doing and perhaps you will say it is what we have been doing. A recent study, however, indicates that a considerable number of administrators and teachers in schools for the blind, and public school classes in the United States feel that we are somewhat negligent and complaisant toward our work.

There is much criticism by teachers in residential schools, in public school day classes and by officials in departments of education regarding the slow tempo which operates in some schools for the blind. There is considerable criticism of the theory and methods still in use in some schools. There is a feeling that complacency exists in certain of our residential schools. It is felt by certain placement agents that graduates from residential schools are somewhat difficult to place because of their attitude that the world owes them a living.

With all of our effort to avoid certain undesirable results of segregation, it is still felt that they exist to a certain degree and in some schools more than in others. It would seem, however, that the same persons who make these criticisms believe that they could be corrected if the personnel of the various schools were

better prepared and more alert to existing valid criticisms and problems; if the courses were more flexible and more up-to-date; most certainly there is general agreement that much advance could be made if we had more competition among the schools for the blind in scholastic endeavor, and if we were to be brought into closer comparison in respect to achievement in the public school classes for regular pupils.

Under such a program the youngsters have an opportunity to observe the interrelation between theory studied in the classroom and its practical application in industry. The intimate contacts with workers provide pupils with a knowledge of labor problems, and an opportunity to rub elbows with seeing people on a common level. An unusual opportunity is afforded the visually handicapped boy or girl to learn the necessity for cooperation with others and for obeying instructions to the letter. This program may be scheduled with the pupil spending part of each day in school and part of the day in the industry, or the pupil may spend alternate periods of from a month to six weeks in the school and then the same length period in industry.

Another plan which may be used is a summer work program in cooperation with industry. This plan has merit and presents fewer conflicts for the administrator.

Any school which does not find it practical to follow either of the plans described may study the school program carefully and make adaptations to give the training in manual dexterity and in the social attitudes necessary for successful work, as Mr. Scarberry suggests has already been done in the Ohio School.

Whichever procedure is followed, we, as teachers and administrators, must leave the confines of our schools and learn for ourselves what the placement agents and industry expect of blind workers. We cannot forget that employees will be much more critical as the demand for labor decreases. We must be ready to meet that criticism. We cannot afford to ignore this challenge unless we are ready to admit that the main objective of a school for the blind is to train intelligent loafers who will live out their years on the bounty of a benevolent government. We cannot accept that point of view for our schools any more than we would approve such an objective for a school for seeing children.

If we expect to make changes to keep pace with the postwar world it will be necessary for us to study the educational needs of visually handicapped children in terms of the local situation. A study of this type could be made through the medium of the following five steps:

I. What will the state in which the school is located be like in the decade following the war?

This step involves a study of the problems of population changes, economic developments, home conditions, and community resources as they will affect the blind.

II. What type of pupils will you have in your school?

The concern here is the intellectual level of the pupils, their various abilities and interests. We must consider the amount of vision, how many are totally blind and how many have useful vision.

III. What type of education is needed for your particular state and your caliber of pupils?

Our task is to determine the broad general objectives of education for our school in the light of the trends discovered in steps I and II. These objectives should define the basic knowledges, skills, attitudes, and loyalties our pupils need.

IV. What should be discarded and what should be added to the school program in terms of the objectives formulated in step III?

The best thought of administrators, teachers, placement agents, and community leaders will be necessary for the successful carrying out of this step. We have always found it easier to add to the curriculum than to subtract from it. We long ago reached the saturation point in

the quantity of material which we offer. It is past time for us to decide what may be discarded as well as what should be added.

V. How can the program be put into operation?

Few of us will feel it advisable to make revolutionary changes over night. Rather, we will prefer to make a careful check to determine which needs are most immediate, those rapidly crystallizing, and needs definitely for the future. Thus gradual changes can be made and tested in the light of experience. That would seem to be the sensible course of action for us to follow.

DISCUSSION

NEAL F. QUIMBY

Superintendent, New Mexico School for the Blind

Some Suggested Changes In Instructional Procedures

Any discussion of the changes which will or should take place in our educational program in the postwar world must be to a large degree hypothetical until such a time as we have a more adequate picture of what the postwar world will actually be. Some feel that the schools will be unchanged by the war and that after the war they will carry on as before. Another view frequently expressed is that the school must undergo a complete transformation in order to keep pace with the social and economic changes which will come about as a result of the war.

We are reasonably safe in predicting that the school will find its proper place somewhere midway between these two extremes. Fighting a global war has resulted in knowledge of places, climate, topography, resources, scientific discoveries, languages, and the customs of other people which were largely unknown to most adults before Pearl Harbor. This new knowledge makes the material contained in our textbooks rather dry fodder for the questing minds of our youngsters. In the period following the war this new knowledge will be expanded even farther, and the school which attempts to maintain the status quo will be unable to hold its place as a leading educational institution. Of course, we all realize that change is not necessarily progress, it may equally well be retrogressive. As Mr. Scarberry has pointed out, we need constant critical examination of all courses in order that we may eliminate extraneous material. We must utilize the same procedure when we seek to add new material to our curriculum. Educators have been accused, and with some justification, of being faddists ever searching for a panacea for our many educational ills.

Mr. Scarberry could make no more vital contribution than his statement that we must: "Cooperate more closely in studies and work with the commissions and placements to the end that wiser and more permanent placements may be made." A large number of placement agents and many employers have criticized us severely because, in their opinion, many of our pupils have not had the proper training to enable them to compete successfully in industry. They are in agreement that we have failed to teach our pupils how to work for long periods of time at one task, and in our effort to make the educational process interesting we have failed to develop satisfactory work habits. I cannot help but feel there is much justification for this criticism and that it is our duty to so utilize the school program that when our graduates go out into the world of work they will have no difficulty in making the transition from school to industry.

The one way to meet this problem is to provide work experience which will help our pupils prepare themselves to take their places in a rapidly changing

social, economic, and occupational world. This may be done by means of a cooperative work plan in which the pupils spend part of their time in school and part in industry. The inclusion of such a plan in the program implies the willingness on the part of school administrators to sacrifice some of the traditional scheduling of class hours. School programs would have to be individualized to make it possible for pupils to go on the job when most convenient for the employer. Without doubt there will be administrative difficulties encountered in co-ordinating the school work plans. Also, there will be dissenters among the traditionalists as to the value of such education; however, there is no question but that for many of our pupils practical constructive work is a better means of stimulating interest and developing good work habits than any other type of training we can offer.

The study and critical investigation to which we refer was initiated by the Joint Findings Committee and was carried out through the cooperation of the Ohio State School for the Blind and the Ohio State University, and through the kindness of various schools of the United States which were asked to cooperate. A careful reading of this study in our opinion will make us all properly critical of the achievement of our pupils and will inspire us to make any necessary changes in the light of our present day economic and social situation.

For several years, in our own school, we have been making investigations and studies looking toward better preparation for placement of our pupils in industry. We have been greatly pleased and gratified to know that the general training we are giving seems to be highly efficient and satisfactory to our state placement agents. In order that you may receive a first-hand report of this reaction of the state placement agents we quote an article written by Mr. E. R. Steece, who heads the placement work in Ohio.

"In view of the fact that the number of operations now being performed by blind persons in industrial concerns is well into the hundreds, it is obvious that any training given students for such work must be of a general nature. Training for one specific job would limit a student's possibility of securing employment and would doubtless necessitate the use of specialized equipment which is difficult to obtain. Hence, it would seem far wiser to teach the fundamentals in certain classes of operations, such as inspection, assembly and machine work. With this general knowledge as a background, specific training can be given to the student in a very short time by a placement agent. Experience has shown that the type of operations adaptable to blind persons are unskilled or, at best semi-skilled. Hence little time is required for specific training. The method adopted by the Ohio School for Blind in preparing students for industrial placement seems to be quite adequate. The school, which for some time has had a course in general shop work, has simply expanded this course to meet present day needs. While students are not instructed in the use of highly specialized machinery, they are given instructions in and become familiar with a few types of fundamental machines, such as the drill press and the lathe. Regardless of the fact that they may have never worked with such specialized machines as vertical and horizontal boring mills, turret lathes, broaching machines and wire-stripping machines, they will be prepared to receive specific training on these machines because they will have learned certain general principles and will know how to approach with safety any type of machine.

"In the field of inspection, students receive training in conventional gauging. They become familiar with the fundamental gauges, such as snap gauge, plug gauge, ring gauge, depth gauge, length gauge, and while they may be placed on a job where the materials being used are entirely new to them, the gauging principle will be the same.

"In the field of assembly, instruction

in the use of fundamental hand tools, such as the screwdriver, wrench and pliers, in putting together various small assemblies, has proved adequate in preparing the students to perform simple assemblies ranging all the way from running down screws and nuts to the complete assembly of fuse block panels for aircraft. At present the school is experimenting in the field of testing. All existing standardized mechanical aptitude tests which have or can be adapted to the use of the blind pupil have for some time been used by the school. If additional adequate tests of mechanical ability of manual dexterity can be developed, the job of the placement agent will be made easier. However, it is well to remember that tests, unless scientifically developed and interpreted, by experts, are of little value, and can be extremely misleading.

"One of the greatest problems of placement agents deals with factors equally as important as the actual ability of an application to perform a job. These include such things as an applicant's personal appearance, and social and mental attitude. In this respect, a school for the blind can do much in preparing a student for outside employment. This agency has had only one or two placements fail because of inability to do the job. There have been a number of failures, however, due to inadequacies in the factors just referred to. For instance, there is the type of person who, after he has been on the job a few days, thinks he can tell the boss how to run the department. There are no more offenders in this respect among the blind rather than among the normal group, but one instance of this on the part of a blind worker may halt placement of blind in that particular plant, or even affect the entire placement program of a community. We cannot afford to suffer such set-backs at a time when industrial placement of the blind is coming into its own, and when we now have the greatest opportunity ever to sell to the employer and to the public the idea of utilizing blind labor."

By way of recapitulation we propose:

1. Constant critical examination of all courses to ascertain if dead and extraneous content is to be found. If such material is found it must be immediately eliminated.

2. Make proper use of pupils' and teachers' time; the pupil must realize the value of time as an important element in learning and in other life situations.

3. We have control of the pupils' time and routine to a degree comparable to the army. Are we making wise of this opportunity?

4. We should cooperate with public schools in a comprehensive testing program to compare adequately and fairly the achievement of our pupils.

5. Cooperate more closely in studies and work with commissions and placements to the end that wiser and more permanent placements may be made.

6. Most emphatically we must teach pupils the American way of life and appreciation of American institutions and the sacrifices now being made to perpetuate them.

Read by Dr. Quimby.

REPORT OF THE COMMITTEE ON THE LITERARY COURSE OF STUDY

NEAL F. QUIMBY
Superintendent, New Mexico School for the Blind

The committee has not had the time available to delve very deeply into the many problems concerning our literary course of study. However, we feel it desirable to consider several problems which are of vital interest to educators of the visually handicapped.

The overworked questionnaire method

was utilized to obtain information on the thinking of the various schools on these problems. Replies were received from thirty-five schools. I shall consider the questions in the order presented.

1. Do you have an individualized program in which each child progresses at his own speed?

Seven schools report that a completely individualized program is followed in their respective schools and fourteen others make no serious attempt to individualize the program to take care of the variations in pupils.

The unusually small classes common to most schools for the blind offer a real opportunity for a worthwhile individualized plan which would take into consideration the capacities of each pupil regardless of the classroom in which the pupil might be sitting. It is questionable whether we can do justice to our pupils merely by following traditional and in some cases outmoded public school methods.

2. State in which grades the program is individualized.

Three schools individualize the program in the first and second grades only, while six have such a program throughout the elementary school. Two schools have a partially individualized program from the first grade through the junior high; eight from the first grade through the senior high, and one school individualizes the high school program; another tries to solve the problem by means of homogenious grouping.

3. Is the classwork in the grades organized around large units of work, or is each subject taught as a separate unit?

Large units are used as the basis of instruction in eight schools; nine make use of large units and also use individual subject divisions, and eighteen teach entirely by means of individual subject matter classifications.

This variation in methodology in our schools is only natural in view of the divergent and conflicting philosophies which have aroused bitter controversies in the educational world. A perusal of the latest literature dealing with the philosophy of modern education leaves us somewhat bewildered. The conflict of authorities makes it necessary for us to think for ourselves; and until we have reached a decision, we shall be wise to keep the idea in mind that there may be merit in each philosophy. We should all like to be idealists, yet it is difficult to accept some of the doctrines that many idealists proclaim. Some would like to be realists or pragmatists. These two words have a solid and objective sound; but here, too, we find it difficult to accept all their ideas. It is conceivable that many of us will find ourselves belonging to all types. However, eclecticism cannot be a very satisfactory resting place for a permanent philosophy; though it may be a necessary stage to go through. Finally it will be advisable for us to examine critically each of the philosophies and its implied educational methods with the idea of accepting one in its entirety, or of accepting the major tenets of one with certain modifications derived from other philosophies. At any rate, we must be prepared to defend the philosophy which will inevitably be revealed through the educational methods and procedures we use in our schools.

4. In what way are school subjects correlated?

It is gratifying to find three-fifths of the schools correlating subjects in one form or another. The larger number correlate the social studies and many correlate English with reading, writing, spelling, typing, or other studies. Only fourteen schools have no plan to take care of this phase of educational method.

5. Is any attempt made to correlate manual arts with literary work?

Six schools make a serious effort to correlate manual arts with literary work, and nine others have made some progress along this line. Twenty schools make no attempt to correlate the two fields.

6. At what grade level is the school departmentalized?

Here we find such variations in the different schools it is impossible to show any trends whatever. The point at which a

school is departmentalized seems to depend upon the size of the school and problems involved in scheduling.

7. Do you find that there is a need for braille books for the slower pupils which have an elementary vocabulary suitable for lower mental ages, but with a story based on more mature social and emotional development?

A need for books of this type was manifested by twenty-eight schools. Three schools saw no need for such books and four expressed no opinion. A number of books of this nature have been published for sighted pupils who have reading disabilities, and the committee recommends that the Printing House consider embossing a number of these for the use of all the schools interested.

8. Should a committee work on the development of a core curriculum for all schools for the blind, or does variation in state courses of study make this impractical?

A majority of the schools feel that the development of a core curriculum would be impractical; however, thirteen expressed a desire for such a curriculum. Surely those schools which are not concerned with compartmentalized subject presentations would find such a study definitely worthwhile. However, it is well to remember that it would take several years of intensive work to prepare a satisfactory core curriculum.

9. Please list the achievement and intelligence tests which are given regularly in your school.

There has been marked growth in the scope of the testing program in our schools in recent years. Only thirteen schools are not utilizing any of the tests which have been adapted and made available for the visually handicapped. The following list of the tests reported may be helpful:

No. of Sch.	Type of Test	TEST
13	Achievement	Stanford Achievement
4	Achievement	Myers-Ruch
3	Achievement	Sones-Harry
1	Achievement	Monroe Silent Reading
1	Achievement	Metropolitan Achievement
1	Achievement	Los Angeles Reading
19	Intelligence	Hayes-Binet
5	Intelligence	Wechsler-Bellevue
2	Intelligence	Kuhlman-Anderson
1	Intelligence	Terman Group Test of Mentality
4	Aptitude	Various mechanical aptitude tests
2	Aptitude	Seashore Test of Musical Ability
3	Vocational Interest	Kuder Preference Record
1	Vocational Interest	Occupational Interest Inventory
1	Vocational Interest	Miner's Analysis of Work Interests
1	Vocational Interest	Strong's Vocational Questionnaire for Men
1	Vocational Interest	Strong's Vocational Questionnaire for Women
2	Personality	California Test of Personality
2	Personality	P. B. S. Personal Inventory
2	Personality	Bell Personality Inventory

We hope that more schools will take advantage of the opportunity presented to make use of these tests. We would like to inject a note of warning, however, and that is objective tests are not a substitute for sympathetic understanding and an intimate knowledge of the individual pupil.

In conclusion, the committee suggests that we study the philosophical aspects of our educational problems in order that we may make a more systematic approach to the problems of method and the course of study. Only so can we develop programs which will meet the test of time.

THE EDUCATION OF THE NEGRO BLIND IN THE UNITED STATES

CHARLES BUELL

Progress in the education of the Negro is dependent upon ameliorating the racial dilemma. Justice will continue to move slowly. The writer agrees with Cohn that a satisfactory compromise could be obtained more quickly by ruling out segregation and "giving the Negro his civic rights; the right to justice in the courts; the right to security in his person and property; the right to a fair distribution of tax money for purposes of education, health, and public improvement." Research work by Cohn shows that Negroes are more than paying their way in education.

The purpose of this paper is to give the outstanding results of a thesis later to be published in full, and in a general way to make known the status of education of the Negro blind in this country. According to the PROCEEDINGS of this convention this subject has not been discussed here since 1880.

This paper attempts to determine what the curriculum is for the fifteen residential schools for the colored blind and to compare it with that found in similiar schools for white blind children. Some special problems in the education of the Negro blind will also be considered.

It is hoped this study will be the foundation for research, planning courses of study, and formulating a philosophy of the education of the colored blind.

The data upon which this study is based were secured from questionnaires returned by fourteen of the fifteen schools for the Negro blind and by personal visits to four of them. Kentucky did not take part. To obtain the information about Negroes in the North and West post card questionnaires were sent to fifteen schools for the blind.

In the line of works on curriculum, a study made by Neal F. Quimby was used to gain data on schools for white blind children. Also Ralph Merry's work, considered the best general book in the field of education of the handicapped, does not consider the Negro blind. In another outstanding comprehensive work, Harry Best gives isolated bits of information on the educational provisions for the Negro blind. His figures on the employment of Negro blind are probably the best in existence even though they are nearly twenty-five years old.

There are only two studies that deal in a general way with the education of the Negro blind. About twenty years ago Dobbins made a study in which some of the material, according to the present work, is not entirely accurate. However, it is very helpful because there is practically nothing else from which to draw information. Dobbins assumed that all Negroes wanted segregated schools, but many leaders among the colored people have expressed the opposite point of view. According to Dobbins all the colored schools offer broommaking, piano tuning, sewing, and fancy work. The present study indicates that half of the schools offer broommaking, sewing, and fancy work. Only South Carolina offers piano tuning. Of course, today the schools for the colored offer much more academic work.

In a study made last year Bischoff presents some valuable information on the training and salaries of colored teachers and the sources recommending children to schools for the colored blind. Lowenfeld shows that teachers of the Negro blind are as well prepared as white teachers but receive from one-half to two-thirds of their salary. This may be true in some of the colored schools but the author has evidence of the lack of teacher training in Arkansas, Alabama, Georgia, Mississippi and Maryland.

Thirty schools for the blind report 740 Negroes in attendance. Of this number

615 attend the fifteen segregated schools where they are taught by 84 colored teachers and five and three white teachers respectively in Maryland and Alabama.

The average I.Q. measured by standard tests is 98 in eight southern schools for white blind children. Records of 157 colored blind children in five segregated schools show an average of 83. Research work in public schools indicates that the measured intelligence of Negro children is influenced by their environment. Griffith found considerable relation between the type of home from which children came and their intelligence. Vocabulary studies and studies in reading furnish additional evidence. Published reports from testing departments of public schools show a retardation for Negroes of 1 to 4 years in terms of national standards of achievement tests. Only six schools for the colored blind have done any testing. The above facts seem to be confirmed. In the light of these facts only Texas and West Virginia have classes for the backward. However, Louisiana and South Carolina follow a policy of not accepting students with an I.Q. below 70. In other schools the backward pupils are in a sad plight.

Of 615 colored students in segregated schools not more than 80 are above the eighth grade level. This means that not more than 10 per cent graduate from high school. There is a relatively high correlation between the economic status of the family and persistence in school. Seven schools for the colored blind offer four year high school courses while in North Carolina it is three years. Arkansas and Georgia give instruction through the ninth grade while it is carried through the tenth grade in Maryland and Virginia. Mississippi and Alabama offer no high school work, but in the former state students attend the local Piney Woods High School. The students with ability in Maryland, Virginia, and Georgia finish their education at local high schools. No provision is made for high school education of the Negro blind in Arkansas and Alabama.

According to school superintendents not more than 30 per cent of colored blind students become completely self-supporting. The author feels that some of these reports were rather optimistic and that a figure of 15 per cent would be more accurate. Only Florida, Mississippi, Texas and West Virginia report possessing reliable follow-up records. In other words most of the schools do not know what percentage of their students will gain employment.

Two-thirds of the colored school superintendents believe their curriculum should be similar to that found in schools for white blind children. The present study agrees with studies made in public schools which show that this conviction is not put into practice. Caliver's study pointed out that Negro schools show an unwillingness to adapt the curriculum. Cooke showed that superintendents in charge of white and colored public schools do not give sufficient time to their Negro schools. It is also pointed out that much of this is due to the lack of funds and superintendents' responsibilities to their articulate (white) constituency. Thomassen and others have indicated the unsuitability of the traditional formal instruction and the necessity of revising the content and method in the light of the needs, experiences and interests of the children. Among schools for the colored blind, Louisiana is one of the few following this philosophy. According to Thompson the schools for Negroes are invariably inferior because of small expenditures for teachers' salaries, buildings and equipment. Applying this research work to schools for the colored blind we find Alabama employing three teachers for fifty students. The buildings and equipment in North Carolina are notable exceptions to the rule.

In general the academic curriculum of schools for the colored blind is similar to that found in schools for white blind children, but the great majority of Negro students do not attain as high an educational level. Through Federal Funds and

the American Printing House for the Blind, schools for the Negro blind are well-supplied with Braille books. Unfortunately, most of the schools use only the textbook method of teaching. All the schools for the colored use the "Unit Mastery Arithmetic" while two-thirds of them use Sharp's "English Exercises" and Horn and Ashbaugh's "Fundamentals of Spelling." Half of the schools use the Elson Basic Readers. Social studies texts are extremely varied, but nearly all the schools make use of the various Braille current events magazines.

The curriculum in vocational training differs from that of schools for white blind children in several respects. The average time devoted to manual training each week is 400 minutes which is 150 minutes more than in schools for the white. Among the non-segregated schools all offer sewing, two-thirds canning, piano tuning, and basketry, one-half brushmaking, weaving, woodwork, and knitting, three-fifths leatherwork and cooking, one-third agriculture, and one-tenth broommaking. Among schools for colored blind children all offer canning, two-thirds offer brushmaking, one-half sewing, weaving, knitting, broommaking, basketry, leatherwork, and cooking, one-fifth gardening and woodwork, and one-seventh mattressmaking. South Carolina offers two years piano tuning to a limited number of students. In comparison with white students the colored get more chair caning, brushmaking, broommaking, mattressmaking, cooking, and leatherwork, while they get less sewing, basketry, piano tuning, woodwork and agriculture. Since most of the Negro race must work in domestic and unskilled labor, it would seem that more emphasis should be placed on such subjects as cooking, sewing, woodwork, and agriculture, while less time should be spent on chair caning. Chair caning can be learned in at least one year, but many students are forced to follow this subject year after year. West Virginia emphasizes hog raising, poultry husbandry and dairying. Louisiana and Virginia are outstanding in offering gardening. Louisiana, West Virginia, Oklahoma, and a few other schools emphasize home economics—particularly cooking and canning.

Among schools for the colored blind one-fourth teach pencil writing and one-half offer typewriting. In schools for the white all have typewriting and two-thirds offer pencil writing. Other commercial training in schools for the colored is limited to a salesmanship course in Oklahoma and junior business training in Arkansas and Tennessee.

The present study indicates that the average time spent on music in schools for the Negro blind is less than in schools for the white—the figures being respectively three hours and five hours a week. The only schools exceeding the average for white blind children are Florida, North Carolina, and Tennessee. One reason for this difference in time is that music training in the schools for Negro blind is limited almost entirely to piano and choral work. Five schools offer rhythm bands in primary grades, while North Carolina, Tennessee, Virginia, and West Virginia have orchestra work. North Carolina offers a public school music appreciation course.

The physical education program is very limited in schools for the Negro blind. Alabama, Arkansas, Mississippi and Oklahoma do not offer an organized program. Two hours is the average time devoted each week to physical education. All schools for the white offer tumbling and track and field, while two-thirds have clog dancing. Six schools for the colored offer track and field, three have tumbling and clog dancing, while nine offer gymnastic exercises. Modern thought in physical education does not confirm this emphasis on formal activities.

Negro boys and girls spend on the average of 7 and 9 hours a week respectively on household tasks. However, students in Alabama, Florida, Maryland, Mississippi, and North Carolina spend less than 3.5 hours which is the average time spent by white blind children on household tasks. The colored students in Oklahoma,

Louisiana, South Carolina, and Texas spend more than 14 hours a week in domestic work. It would seem that all Negro blind should have a thorough domestic training.

It seems quite evident that there is a tremendous field for research and plenty of room for improvement in the education of the Negro blind. It is the author's opinion that there are more than one hundred negro blind (on the average) being denied an education in southern schools for the blind. South Carolina, Arkansas admit that they are not providing for a large percentage of their Negro blind. This must also be true in Mississippi where half of the population is colored. Education is being provided for the majority of Negro blind children enabling the superior students to go out into the world to lead happy, successful lives.

BIBLIOGRAPHY

* Bibliography of education of Negro blind

Cohn, David L., "How the South Feels About the Race Problem." **The Reader's Digest,** June, 1944. p. 28.

Coon, C. I., **PUBLIC TAXATION AND NEGRO SCHOOLS.** Committee of the Twelve for the Advancement of the Interests of the Negro Race, 1909. p. 11.

*"Discussion on the Education of the Negro Blind." **American Association of Instructors for the Blind,** 1880 p. 51-57.

Quimby, Neal F., **A STUDY OF THE CURRICULUM OF RESIDENTIAL SCHOOLS FOR THE BLIND,** New York; The American Foundation for the Blind, 1940. p. 221.

Merry, Ralph Vickers, PROBLEMS IN THE EDUCATION OF VISUALLY HANDICAPPED CHILDREN, Cambridge; The Harvard University Press, 1933. p. 243.

*Best, Harry, **BLINDNESS AND THE BLIND IN THE UNITED STATES,** New York; The MacMillan Co., 1934. p. 714.

*Dobbins, Robert W., "The Education of the Negro Blind in the United States," New York; The American Foundation for the Blind, 1927. (p. 9 Typewritten)

*Bischoff, Dorothy A., "Education of the Negro Blind and Deaf in the United States," Boston; Perkins Institution for the Blind, 1943. (Typewritten)

*Lowenfeld, Berthold, **TEACHERS OF THE BLIND THEIR STATUS AND SALARIES,** New York; The American Foundation for the Blind.

Griffith, Loretta S., A STUDY OF THE SOCIAL ADJUSTMENTS OF PRE-SCHOOL CHILDREN. Master's Thesis, Atlanta University, 1936.

Segalla, Fanny L., WRITING VOCABULARIES OF COLORED AND WHITE STUDENTS IN TWELFTH GRADE. Master's Thesis, University of Chicago, 1934.

Stenquist, J. L., SEMI-ANNUAL INSTRUCTIONAL SURVEY OF ELEMENTARY SCHOOLS—WHITE AND COLORED—PRIMARY AND INTERMEDIATE—CITY WIDE TESTS RESULTS OF ALL GRADES AS OF FEBRUARY, 1928. Baltimore Bureau of Research, Department of Education, 1928. p. 62.

Jordan, A. M., "Occupations of Negro High School Graduates in North Carolina." **High School Journal** 18; 24-27; 1935.

Caliver, Ambrose, SECONDARY EDUCATION FOR NEGROES. U. S. Office of Education Bulletin, 1932, No. 17. National Survey of Secondary Education Monograph No. 7. 1933. p 121.

Cooke, D. H., THE WHITE SUPERINTENDENT AND THE NEGRO SCHOOL IN NORTH CAROLINA. Contribution to Education, No. 73. George Peabody College for Teachers, 1930. p. 176.

Thomassen, M. E., A STUDY OF SPECIFIC KINDS OF EDUCATION FOR RURAL NEGROES. Doctor's Thesis. Teacher's College, 1936. p. 104.

Thompson, C. H., "Introduction (The Problem of the Negro Elementary School)." **Journal of Negro Education** I; 101-107; 1932.

*Adam, J. A., "A Department for the Blind Negro Children of Mississippi." **Outlook for the Blind**, 27, 1933, p. 234-235.

*Hubbard, Kate, "Are There Any Blind Black Babies?" **The Survey**, April 15, 1924. p. 91-93.

*Jones, Laurence C., **PINEY WOODS AND ITS STORY.** New York: Fleming H. Revell Company, 1922. p. 151.

REPORT OF BRAILLE COMMITTEE

FRANCIS M. ANDREWS, Chairman
Superintendent, Maryland School for the Blind

Your Braille Committee which was appointed six years ago, submits the following report:

In the past two years Mr. Langan and Mr. Whinnery have left the field of the blind. Mr. Rodenberg, of Illinois, has replaced Mr. Langan, but as yet no one has been appointed in Mr. Whinnery's place.

The Committee believes there are two important points concerning braille, or the use of it, which should be studied. First, should all pupils (regardless of the amount of vision which they have) be forced to learn braille, or should we provide suitable print for them. Second, what methods are used in the transcription of music and is it possible for the several printing houses to use the same method. Many of you may feel that these questions are of no concern of the Braille Committee. Perhaps they are not, but we hope some helpful discussion may arise from our study.

A questionnaire was sent to all of our schools for the blind, a copy of which is attached to this report. Thirty schools replied, but as yet no word has been received from: Alabama, Georgia, Idaho, Kansas, Mississippi, Nebraska, North Carolina, South Dakota, Utah, Virginia and Wisconsin.

Our first question "Do you have regular sight-saving classes for partially seeing children in which ink print texts and other similar materials are used", may have been poorly worded or misleading, as two schools crossed out the word "sight-saving" and wrote in "useful vision" or "visual aid". Nine other schools reported they had sight-saving classes; nineteen said they did not have any such classes. Of these nineteen, ten hope to establish some such class. We suggest that those interested read the reports which the New York Institute for the Education of the Blind and Perkins Institution have put out concerning the work of such classes in their schools.

Practically all of the schools which have these visual aid classes are equipped with special lighting, desks, typewriters, book holders, blackboards and chalk, dictaphones, pencils and paper. The size print used being 18 & 24, with some clear type. Some are far better equipped than others.

All of these classes are also under the guidance of a trained teacher. These teachers having been obtained from Wayne University, University of Wisconsin, Western Reserve, and Michigan State Normal School at Ypsilanti.

As for the question: "Do braille and sight-saving elements conflict sufficiently to warrant advocating separate school systems", there is a marked difference of opinion. Eleven say "No", five reply "Yes" and thirteen have no comment to make. Some feel that it is entirely a question of how many such pupils there are in a given community. If there are

sufficient numbers to warrant the establishment of such a class it should be done, otherwise these children should attend the school for the blind. Should schools for the blind establish such classes, would it not be wiser to change the name of the school, as has already been done in the case of one of our state schools?

The main educational problem in combining braille and sight-saving work is lack of sufficient material in print. What is available in clear type does not coincide with braille, neither is it adequate for the high school pupils. Some superintendents feel that clear type is too large for the partially seeing children in their schools. In some instances there is a definite feeling that the sight-saving pupils are an asset to the blind, in that the latter become more normal from their association with the sight-saving pupils. Neither was it detrimental to these sight-saving pupils to be educated with the blind, for it was believed in many cases to be an advantage as a certain number never adjusted in public school as they could not see the board, even though they were placed in the front seats. They soon lost interest and began to "vegetate". The superintendents of schools for the blind are responsible for the education of these borderline cases. It would seem that the time had come when we should stop saying; "We are a braille school" and to begin to do something constructive for these children with useful vision within our doors. By the term "useful", I mean any amount of vision which may allow the pupil to read print or look at pictures, etc.

The second part of the questionnaire dealt entirely with the problem of music braille. The reason for this was to attempt to find out what methods are used in the schools and perhaps suggest to the several printing presses that it would be helpful to the blind if only one method were used. At the present time one school is using a different style than the bar over bar. This latter style is used by the American Printing House and Jacksonville, and appears to be most satisfactory to practically all the schools. Every privately owned press has a right to emboss music in whatever style it desires, but it does make a problem for the purchasers of music.

Your Committee makes the following suggestions to the American Printing House:

1. We urge that steps be taken to pass the proper legislation whereby the American Printing House would be allowed to print text books in large type (either 18 or 24 point).

2. The books printed in this large type should be on the proper kind of paper used in sight-saving or visual-aid classes.

3. The same text books which are brailled for class room purposes should be duplicated in large print, so that the blind and partially seeing may have the same text books and thereby be taught in the same class.

Respectfully submitted,

Francis M. Andrews

PROGRAM

Wednesday Evening, June 28
Ballroom of Marion Hotel

Toastmaster ..... CHARLES T. EVANS
Assistant to President
Arkansas Power and Light Co.

Vocal Selections ..... MRS. CHAS. E. EICHENBAUM
Soprano
Accompanist, Mrs. G. H. Mathis

Address ..... "Do You Like Arkansas"
JUDGE ED. F. McFADDIN
Associate Justice State Supreme Court

WHAT'S NEW IN TESTING THE BLIND?

SAMUEL P. HAYES, Ph. D.
Perkins Institute

Mental testing is now so common that whenever a child changes his school or a man changes his job he is at once asked for a transcript of his grades and tests to date. Many hospitals and most clinics feel that they cannot attack a problem, physical or mental, until they know all that standard tests can tell them about a client. That the blind may not be inconvenienced, we have tried to adapt to their use a considerable number of tests of all the commoner types. This paper will cover only the newer work, offering a list of references for tests already in use at the 1940 A. A. I. B. Convention.

I. Intelligence tests for the visually handicapped.

Interim Hayes-Benet Tests for the Blind 1942[9]

The 1930 Hayes-Benet test scale, with which many of this audience are familiar, was an adaptation of Terman's 1916 Stanford Revision. While this test has been fairly satisfactory, especially with young children, the appearance of the Terman-Merrill 1937 Revised Stanford-Binet Scale[16] made it necessary to bring our testing up to date, and the Interim Hayes-Binet is the result. In this adaptation, after omitting such tests as could not be given without vision, it was necessary to combine the L and M series into one series for the blind, in order to have a full complement of tests for each year group. It is still impossible to carry the series for the blind below year III, (the tests for the seeing go down to year II) and there is still some uncertainty about the tests for years IV and V, both because of the large proportion of visual material in the tests for the seeing, and the small number of little blind children who come to our attention and can be tested before they are five or more years of age. But the Interim tests are much richer in material which children find interesting; they give a direct comparison with seeing since practically all test items appear at the same age level for the blind as for the seeing and the I.Q. is calculated from the same tables; and these tests share in all the improvement resulting from Terman's twenty-year study, particularly the bonus for bright adolescents. According to our records 17 schools for the blind have ordered the 1942 Interim tests; doubtless orders will gradually come in from the 18 other schools which have bought the 1930 adaptation and are presumably still using it. The general demand for tests adapted for use with the blind is indicated by the fact that we have sold nearly 4500 record sheets in two years, packages going to many city and state school systems, universities and libraries, clinics, hospitals and schools for the feeble-minded.

Wechsler-Bellevue Adult Intelligence Tests 1939[17]

Verbal series for the Blind 1942.[8]

This is an excellent test for adolescents and adults. Only a few minor changes need to be made when testing the blind, the main modification being the substitution of his vocabulary test for his digits test, partly because the vocabulary test is both more interesting and significant, and partly because the digits test appears also in the Interim tests. The Wechsler shows a high correlation with the Interim and thus gives us a good alternative scale for retesting. As it has been standardized on seeing adults, it is especially suitable for the blind at the same ages.

Several attempts have been made to develop test series for the partially seeing. In 1939 Dr. A. W. Brown[4] made a preliminary report upon his point scale developed at the Institute of Juvenile Research at Chicago and called the I.J.R. Test for the Visually Handicapped, but has not yet finished his standardization

nor put the test on the market. In 1942 Dr. Pintner[15] tried giving the whole Terman-Merrill series to 602 pupils in the New York City sight-saving classes, presenting the visual material enlarged about one and one-half times by a photographic process. Between 1939 and 1942 Dr. Baker[2] tested 190 children in the Detroit sight-saving classes, presenting the visual material in larger form, having heavier and darker lines. Both these surveys give fairly normal I.Q. distributions with medians from 93 to 95, about the same results obtained through the use of the 1930 Hayes-Binet tests[7] with 272 partially seeing pupils in residential schools.

While all these test surveys give a fairly normal I.Q. distribution when large groups are studied, it is generally recognized that too much dependence must not be put upon any one I.Q. obtained in a single test of an individual. It is therefore strongly recommended, especially with developing children, that retests be made every two or three years of the whole school population, and more frequently with children who do not progress normally through the grades. Then the I.Q. becomes a very valuable supplement to other data about the child—his school record and his success in standard achievement tests, his home relationships and social maturity.

II. Achievement tests

The Stanford Achievement Test, Forms V-Z, having been used 5 or 6 times in some schools before the last Convention, the new series Forms D-G were next adapted for use with the blind[6] and distributed by the American Printing House[1]. A considerable number of schools have sent their results to the writer for study and interpretation. In general all but one of the 10 tests in this series seem to have been found quite satisfactory and grade for grade these schools for the blind test just about at the seeing norms, when additional time is allowed to make up for the slowness of braille reading. Of course some schools are more successful with some subjects, and others with others; and occasionally grades test out of line, a superior group of pupils testing equal to the grade above which happens to have a less capable group. A considerable number of schools show a dip in the curve for literature or the social studies and might as Dr. Lowenfelt[14] suggests, be brought up to standard by a wider use of the talking book if, as seems likely, their deficiency is the result of too little or two slow reading when braille is the medium of learning. The one test of the ten which has not been found satisfactory is the test of arithmetic computation which seems to make unreasonable demands upon blind pupils.

The Otis-Orleans Standard Graduation Examination[11]

Completion of elementary school work marks an important milestone in a child's educational progress. How can we be sure that Johnny and Mary have thoroughly covered the elementary school subjects—that they have obtained the fund of information and developed all the skills needed for success in the high school? Grade examinations written by the teacher who has taught Johnny and Mary **may** be discriminating and comprehensive; but they **may** only reflect the educational limitations of the particular textbooks used or the cultural preferences of their teacher. The standard examination is an attempt at an objective measurement of educational attainment based upon the content of many textbooks, with standards obtained through the use of the tests with thousands of pupils.

In adapting this test for use with the blind certain new devices were introduced: the matching tests of the seeing edition were transformed into best-answer tests for the blind, because the blind would suffer an added handicap in trying to match two long columns of items; six of the ten tests were given orally, to reduce fatigue in reading and to lessen the effect upon scores of individual differences infacility of braille reading. Also this oral method gave a more complete covering of the test material, for in this testing the whole series of test items was

read to the pupils; when such tests are given by the reading method the slow readers cover only the earlier, easier items and we have no way of determining what success they might have had with the later, more difficult items. This test battery covers the same ten subjects at the Stanford Achievement series.

Myers-Ruch High School Progress Test[12]

This is the briefer of two test batteries intended to do for the high school group, what the Stanford Achievement test does for the grades. It consists of multiple-choice tests in English, Social Studies, Mathematics and Science. There are 30 items in each of the four tests, which seeing pupils are expected to finish in one hour (fifteen minutes being allowed for each test). As adapted for use with the blind, a modified oral method has been devised: in the braille test pamphlets in English, Social Studies and Science, only the alternative answers are printed and not the questions. The tester reads a question and the answers, while the pupil reads the answers in braille, and marks the answer of his choice using a short pencil. This makes it possible to test pupils who are not sure of their braille, and as the whole of the test is used, all pupils have a chance to show their knowledge over the total range of topics covered. A reasonable time is allowed for each question, so the pupils do not feel the strain sometimes associated with a timed test. Only a few schools have used and reported upon this test but the general reaction seems quite favorable. In English and Social Studies the results equal or exceed the seeing norms; in Science and Mathematics the results reflect the difficulties in teaching these subjects to blind pupils. In all four subjects achievement improves from grade to grade, and the individual profiles show strengths and weaknesses which correspond fairly well with the amount of instruction and school success of the pupils. The tests show a satisfactory correlation with measurements of intelligence and with teacher' estimates of the pupils' class work. An item analysis of the tests indicates that the earlier items are easier and the later items are more difficult in much the same proportion for the blind as for the seeing. Percentile norms are provided which may be used in permanent records of achievement.

Sonens-Harry High School Achievement Test, Form A[12]

This is a much more extensive test covering the same four fields of high school work, but in far greater detail. It was first put into braille in 1938 without being especially adapted for use with the blind and seems not to have been found satisfactory, mainly because a considerable proportion of the material was presented in the form of matching tests, which are unduly difficult for the blind. The author had begun transforming this material into best answer tests just before the last Convention, and was very glad last spring to find Mr. O. J. Hill and his colleagues at the Ohio School interested enough in the test to help finish up the job for brailling. A considerable number of the tests are also arranged for the oral method of testing, only the answers being put into braille thus obtaining the advantages listed above for the Myers-Ruch test. As the test is a very long one, perhaps requiring as many as ten fifty-minute periods, schools may prefer to give only a portion of the total battery in any one year. Whatever parts are used at one time, grade distributions and averages may be calculated, individual profiles may be drawn to show success or failure, and reasons for variations in score may be sought in other evidences of ability such as I.Q., in the amount of classroom attention given to the kind of material used in the test, in the pedagogical ability of the teacher, etc. Of course the great variety of types of test material gives this battery real diagnostic value both for individuals and for grades.

Besides these four important batteries of tests, the American Printing House[1] now offers a considerable list of tests in the various school subjects, both for the elementary school and the high school. Many of these tests might well be sub-

stituted for mid-year and year-end examinations since they make it possible to compare results with the norms for the seeing. And as most of them are constructed after a study of many textbooks, a teacher may check up the range and completeness of her work by the results obtained from her pupils.

Special devices for special groups

To measure the school achievement of **non-braille** readers

In every school for the blind there are some pupils who cannot take our group tests in braille with the rest of their grade. They may lag behind the rest in learning to read and write braille because they are dull mentally; they may be partially seeing pupils who have never given themselves whole heartedly to the difficult task of mastering braille; they may be new pupils who have not yet had time to gain facility in braille. For all such non-braille readers a method is now proposed[12] which should make it possible to determine their level of achievement in most of the school subjects without asking them either to read or to write braille. In essence the method consists in having the tester read a question and then the list of alternative answers, assigning a number to each. The pupil has a sheet upon which corresponding rows of dots have been embossed, and a short pencil with which to mark one dot to indicate the answer selected A single example from a word meaning test will make the method clear. The tester reads "A rose is a—1. box; 2. flower; 3. home; 4. month; 5. river. What is the best answer?" The pupil selects the word "flower", which is answer number 2, and then marks the second dot in his row of five. The pupil keeps his place by putting a finger of the left hand at the first dot in each row; if he loses his place he can count down from the top and find the row he should be working on. This method can be used for best-answer tests having 3, 4 or 5 alternatives. For true-false tests the first dot may be taken as standing for true and the second for false.

To measure the school achievement of the **semi-sighted**

By printing any of our standard tests upon the large-type or "bulletin" typewriter now popular in sight-saving classes, the achievement of partially-seeing pupils who can read print better than they can read braille may be measured. We have found it possible to make as many as four copies of the test material at once using carbon.

To measure the achievement of pupils by objective methods before a new teacher is prepared to read in braille per pupils' long answers to essay questions.

Sheets with rows of dots may be used for recording test results and save hours of braille reading for a teacher taking her first class of blind children. She may use many objective tests with which she has become familiar in teaching seeing children. As she will read the test material to the pupils, she will not need to wait to have it put into braille. She may also construct tests in true-false or best answer form using the material she has covered in her own teaching; and she may dispense with the sheet of dots and ask her pupils to indicate their answers by writing a single braille letter or number. If a true-false test is given by this method, the pupils should be instructed to write "c" for true or correct, and "i" for false or incorrect, since these letters are formed with the same number of dots and pupils are prevented from getting help from each other, as they would by listening to the different numbers of dots made in forming "t" and "f". In giving a best answer test several schemes are possible: if there are three alternative answers, the pupils may be instructed to use the numerals 1, 2, 3 or the letters a, b, c with the chance that the single dot will be used only occasionally; or by the letters b, c, and e may be used to prevent poor pupils getting help from good ones. If there are five alternative answers the first five numbers may be used, 1 having one dot, 2, 3 and 5 having two dots each and 4 having 3 dots, one would then trust to variety and the probability that several

children might be writing at the same time and so prevent the passage of information by listening. Or one may use the letters b, c, d, e, and f, thus having 3 letters with two dots each and 3 letters with three dots each.

For teachers who wish to construct their own tests, but seek a wider basis for testing than their own notes and textbook, The Teacher's Handbook of Technical Vocabulary[5] may be found very useful. This pamphlet gives lists of words for the essential elementary ideas in thirteen school subjects, arranged alphabetically under topics. At the back of the pamphlet are sample tests in English Composition and Arithmetic, which illustrate very well how tests may be constructed from the vocabulary lists—in fact parts of the tests the author gives might be made over and used with blind children with relatively little dependence upon braille if either the pupils or the teacher lack comfortable facility with embossed print. Such tests based upon vocabulary may be of great assistance to the teacher as a preliminary to diagnostic and remedial work with individual pupils.

III. Aptitude tests

At last some progress is being made in developing aptitude tests for use with the blind. Previous to 1940 two of my honor students in psychology at Mt. Holyoke College had canvassed the large number of aptitude tests constructed for the seeing, and finding them almost without exception to depend upon eye-hand coordination, had made a few suggestions for tests designed to measure cutaneous and kinesthetic aptitude, and my colleague, Dr. Herbert Moore had tried out a few of these tests in some of the eastern schools. Dr. Stevenson Smith of the University of Washington included three simple performance tests in the Washington Vocational Training Aptitude Scale for the Blind—form board tests, a marble alternator test and a bead-stringing test. But the first really competent attack upon the problem is the recent project initiated at the Trainee Acceptance Center in Philadelphia. Here large numbers of people come daily for testing and guidance so it is possible to establish norms for any tests which look promising. Having been called upon to assist in the placement of some blind clients, the Center selected a number of motor skill and mechanical aptitude tests which seemed feasible for this group and began a research study upon which a report of progress was made at the A. A. W. B. convention last summer.[3] At that time 86 persons had been studied, who were either totally blind or had only light perception—40 pupils at the Overbrook school from 14-27 years of age, 30 blind applicants at the Center ranging in age from 22 to 62 years of age, and 16 blind persons competing with sighted workers in industry ranging in age from 19 to 32 years of age. Five tests were used: Displacing and Turning tests which were an adaptation of the Minnesota Rate of Manipulation test; the Penna. Bi-Manual Worksample, which consists of the assembly and disassembly of nuts and bolts and their placement in rows of holes; the O'Connor Finger Dexterity test with the change that the blind person was permitted to use the less dominant hand to locate the hole to be filled; and a test involving the transfer of 6 different kinds and sizes of nuts and bolts from one upright to another with the help of tools, called the Toolsample. A preliminary study of the results is distinctly encouraging. The group of 16 blind persons in industry test at about the seeing norms in three tests; the blind clients and Overbrook pupils average somewhat lower than the seeing in all the tests, but a considerable number of individuals test at or above the seeing norm, and the authors feel justified in dividing the Overbrook pupils into three groups, 17 who might be reasonably expected to succeed in industry where such motor skills are needed, 10 who should be discouraged from attempting industrial competition, and a middle group of 13 who have acceptable ability in one or two tests but not enough ability to make the prognosis of success at all certain. To

determine whether the relatively lower scores obtained by the blind are due to native differences in manipulative skill, or are merely a result of the handicapped imposed by blindness when a new operation is attempted, an extensive learning experiment has been carried on this year at the Overbrook school, while additional testing has been done at the Center. When these tests are finally released for general use, we should have a scientific and statistically valid instrument for measuring a limited number of motor and mechanical aptitudes needed for success in the industrial activities open to blind workers.

IV. Personality tests

One must beware of people who speak glibly of personality and its measurement. Many colleges devote a whole semester course to a discussion of the definition of personality and its place in social relationships; and the enormous number of tests and scales devised to measure this illusive something we call "personality", indicates pretty well how complicated and unstable is this side of our human nature. Only a few published reports have appeared describing the results of the use of personality scales with groups of blind people, but there is no reason why almost any of the standard scales might not be used in a clinic or employment office as a preliminary or supplement to an interview. The slight changes which might seem advisable in dealing with a blind person would not necessarily invalidate the test, since the purpose in its use is not to get a score or a "personality quotient" but to bring to the surface social attitudes and tendancies which may be discussed to advantage in an interview. Any agency planning to study the personality of its clients would be well-advised to look through a critical review of published scales and select the one which best meets the local needs, while standing up pretty well under the criticism of the reviewer. In Hunt's[13] Personality and Behavior Disorders, Part II, pages 139-251, three chapters are devoted to methods of assessing personality: a chapter on subjective evaluations of personality, including recommendations and application forms, interviews, personality ratings, popularity and group status, and case study methods; a second chapter on personality tests, including tests of character, tests of temperament including various self-inventories, tests of attitudes and interests and a long list of measures of specific qualities such as accuracy, aspiration, confidence, consistency, humor, maturity, originality, punctuality, sociability, etc.; and a chapter on the interpretation of imaginative productions.

A few of the critic's conclusions may well bring this paper to a close. "The measurement of character and personality by means of objective tests has progressed considerably during the last two decades. Instruments have been devised which are of value in education, measuring the relative outcome of various methods and curricula, in vocational orientation and guidance, revealing the various shades of interest, in clinical diagnosis of certain types of problem cases and, above all, in the study of variability with regard to numerous aspects of character and personality. Of limited value are those testing techniques which purport to measure the more intimate elements of personality, the unresolved conflicts within the individual, the disturbance resulting from contradictions between personal interest and social standards and the maniford aspects of personality disorganization. The intrinsic complexity of the concepts involved, the semantic problem of avoiding vague and variedly interpreted words and phrases, and the difficulty of overcoming resentment toward personal questions introduce elements of uncertainty in the results of such tests. The most dependable application of personality tests is in the study of groups and trends. They are less reliable when applied to one particular person. Attempts at the construction of an over-all test of personality, easily administered and rapidly scored, have been disappointing. In

view of the extreme complexity of the nature of personality and its susceptibility to change, it is not likely that we shall ever have a reliable personality test yielding a Personality Quotient similar to the IQ." (13, pp. 202-3)

References on Hayes' "What's New In Testing the Blind?"

1. American Printing House for the Blind, "Braille and Ink Print Test Materials".

2. Baker, Harry J., "Introduction to Exceptional Children", N. Y. Macmillan, 1944.

3. Bauman, Mary K., "Selection Techniques for the Industrial Placement of the Blind", A. A. W. B. Report 1943, 34-8.

4. Brown and Davidson, "The development and standardization of the I. J. R. Test for Visually Handicapped Children", J. of Applied Psy., 1939, 23, 229-ff.

5. Cole, Luella, "The Teacher's Handbook of Technical Vocabulary", Bloomington; Pub. School Pub. Co. 1940.

6. Hayes, Samuel P., "Standford Achievement Tests for the Blind: new and old", Teachers Forum for Instructors of Blind Children, 1941, 14, 2-15.

7. Hayes, Samuel P. "Contributions to a Psychology of Blindness", Chap. 5. Intelligence and amount of vision, N. Y.: American Foundation, 1941.

8. Hayes, Samuel P., "Alternative scales for the mental measurement of the blind", Outlook for the Blind, 1942, 36, 225ff.

9. Hayes, Samuel P., "A second test scale for the mental measurement of the visually handicapped", Outlook for the Blind, 1943, 37, 37-41.

10. Hayes, Samuel P., "Arithmetic: teaching and testing in schools for the blind." Outlook-Forum 1944, 38, 99-108.

11. Hayes, Samuel P., "Standard Graduation Examination for Elementary Schools", Teachers Forum, 1939, 12, 22-32.

12. Hayes, Samuel P., "New methods of testing the school achievement of blind pupils", Outlook-Forum, 1943, 37, 277-282.

13. Hunt, J. McV. Editor, "Personality and the Behavior Disorders", N. Y.: Ronald Press 1944 2 vols.

14. Lowenfeld, B., "New Reading Practices", Teachers Forum 1940, 13, 31-34.

15. Pintner, R., "Intelligence testing of partially sighted children", J. Educ. Psy., 1942, 33, 265-272.

16. Terman and Merrill, "Measuring Intelligence", Boston: Houghton Mifflin, 1937.

17. Wechsler, David, "Measurement of Adult Intelligence", Baltimore: Williams Wilkins Co., 1939.

REPORT OF THE JOINT VOCATIONAL GUIDANCE COMMITTEE

We wish to report that there has been no meeting of the joint committee due to the fact that distances have made this rather impossible. We also regret that this report may give the impression that we are not interested but we assure you that we hope to accomplish more in the coming year.

As Miss Newman has said: "We cannot control the poor workers who drift out of our schools along in the 4th, 6th and 8th grades, and are applying and often getting jobs for which they are not fitted, and thus spoiling good jobs for those qualified."

We need more reference material for blind pupils which will give them information concerning occupations. Now 99 per cent of this material must be brought in by the teacher and read to the pupil.

We recommend, now that more blind are being placed in industry more experience should be given to all high school pupils through the Industrial Arts Department in the use of tools and electrical equipment.

Teachers in Schools for the Blind who are interested in Vocational Guidance should have special training in this field and take charge of the guidance program.

Careful consideration of the abilities of those who are being recommended for college should be given, and college entrance examinations conducted.

Interest, aptitude, dexterity and ability tests should be given by the Vocational Counsellor as a guide and choice of preparation for a career.

In order that a full record be kept of a blind pupil's progress throughout his school life, the vocational guidance person should have available health records, the social and moral record as well as unit reports of the teachers, achievement tests, I.Q. tests, etc.

If any group needs placement and follow-up work, it is our blind students, and this should be a definite part of any guidance program.

REPORT OF THE AMERICAN FOUNDATION FOR THE BLIND

ROBERT B. IRWIN
Executive Director

Field Work

The outstanding development in state programs for the blind during the past year has been the pasage of the Barden-La Follette Act, which makes Federal funds available to state agencies for the blind for their activities for the vocational rehabilitation of the employable blind. The Foundation has made its services available on request to state agencies charged with this responsibility, and in 14 states it has participated actively in the preparation of the state plans. In addition, we have cooperated as closely as possible with the staff of the Federal Office of Vocational Rehabilitation.

The regular field services of the Foundation have been continued, and consultation service has been given at the request of state agencies for the blind in Illinois, Idaho, Iowa, Kansas, Kentucky, Maine, Massachusetts, Nebraska, New Hampshire, Oregon, Rhode Island, Georgia, Michigan, West Virginia, Tennessee, Minnesota, and Mississippi, and to private agencies in Washington, D.C., Detroit, Cleveland, Boston, Philadelphia, and Lincoln, Nebraska.

Institutes

As public assistance programs become

better established in the various states, there is increasing recognition of the special problems involved in administering financial assistance to the needy blind, and of the necessity for special training of staff members engaged in this work. In an effort to provide such training, the Foundation cooperated with the Illinois Public Aid Commission in a state-wide series of nine institutes on work with the blind which were attended by approximately 700 state and local public assistance workers. A similar institute for state workers was held in Indiana at the request of the Indiana State Department of Public Welfare.

Summer School Courses

The Foundation's second summer session training course for workers with the adult blind was offered at Western Reserve University in Cleveland last summer. Twenty-six students from 15 states were in attendance, and the group included home teachers, placement agents, executives of agencies for the blind, and seeing social workers. Plans are being completed for another summer session this year.

The summer school course for colored teachers of colored blind children was also given at Hampton Institute last summer, and will be offered again this year.

Two new summer school courses for teachers of the blind will be conducted during the present summer—one at the University of Wisconsin and one at the University of Washington.

Other Activities in Professional Training

The Foundation joined with the Pennsylvania Institution for the Instruction of the Blind in sponsoring the Overbrook Home Teacher Training Course, and two members of the Foundation staff have given courses to the group of home teaching students, for which credit is given at the University of Pennsylvania School of Education.

The Foundation has continued to act as secretariat for the A. A. W. B. Committee on Professional Standards, and the A. A. W. B. Board of Certification. This Board is accomplishing very gratifying results in its efforts to raise the professional standards of teachers and workers for the blind.

Talking Book Department

During the past year the Talking Book recording studios have produced 2,738 master recordings largely for the Library of Congress. It is interesting to note that the Foundation, with the help of the Library of Congress, the American Bible Society, and the New York Bible Society, and certain private individuals, has at last completed the recording of the King James version of the Bible. The entire Bible comprises 169 twelve-inch double records.

We have a large number of applications from blind people who wish to buy Talking Book reproducers, but unfortunately war conditions make it impossible for us to obtain the parts with which to build these machines. There are probably one thousand blind people in this country who stand ready to buy machines as soon as the parts for their construction are available.

Foundation Library

It is now 15 years since the Foundation added a trained librarian to its staff. In these 15 years the Foundation has established itself as a unique center for information on matters pertaining to blindness and the blind. It offers a wide variety of services, such as advice to students on reading matter and choice of subjects for research; assistance to agencies in planning and conducting special courses; compilation of bibliographies and special reading lists on subjects relating to blindnes, etc.

Study of Problems of Children with Severe Visual Handicaps

In order to determine and meet the needs of children with too much vision to be educated by the usual methods in schools for the blind and too little vision to be able to follow instruction in the regular public school classes, comprehensive studies were conducted in Florida and Maryland with the cooperation of the superintendents of the schools for the blind and other state and local authori-

ties. These studies, sponsored jointly by the American Foundation for the Blind and the National Society for the Prevention of Blindness, have resulted in recommendation, for providing the necessary services in these states. These recommendations, for providing the necessary services in these states. These recommendations, it is hoped, will set the pattern to be followed in other states.

National Industries for the Blind

During the past year 56 workshops for the blind located in 32 states participated in government orders. About 2,500 blind people were employed in these shops, and they received over two million dollars in wages. From January 1, 1938 to March 31, 1944, 74,196,000 articles valued at approximately $23,900,000 were made by the blind.

Scholarships

Scholarships were awarded to 19 blind students who are preparing themselves for some vocational or profession, the majority of these being for the amount of $250 each.

Special Services

The Foundation through its special services has issued during the past year 2,763 identification railroad coupon books and 1,797 bus coupon books, enabling a blind person and his guide to travel for one fare; has sold 445 watches for the blind, and has distributed free to blind men 1,800 pipes.

The Foundation is presenting each service man who loses his sight in the present War with one of the special watches used by the blind.

We have on hand over 900 orders for watches from individual civilian blind people which we have been unable to fill because of the restrictions on non-war production. It is hoped a limited number of watches for the civilian blind will soon be available.

Cooperative Relationship with Schools for the Blind and Commissions or Other Rehabilitation Agencies for the Blind

LON ALSUP
Executive Secretary, Texas State Commission for the Blind

In order that rehabilitation services may be made effective to blind persons attending State Schools for the Blind, it is imperative that the closest cooperative relationship be maintained between schools for the blind, commissions, and other Rehabilitation agencies for the blind.

In 1943, the National Congress amended the Vocational Rehabilitation Act so as to provide, "In any state where there is an agency to administer Vocational Rehabilitation services to the blind." Most of the states of the Union prior to the enactment of this law had already pioneered in the Vocational Rehabilitation Program for the Blind, and had passed appropriations to provide for such rehabilitation services. It is noted, however, that the appropriations made by the various states to either Commissions for the blind or other designated agencies had failed to give adequate appropriations for a full rehabilitation program providing physical restoration, Vocational training, guidance, supervision, and placement into gainful employment. When the Congress amended the Vocational Rehabilitation Act, it also provided for a fifty per cent matching of State and Federal funds. This made available a reasonable amount of funds so as to provide for an adequate vocational rehabilitation program whose objective must be the placing of adult blind men and women into gainful employment.

Rehabilitation agents, placement agents, and eye medical social workers, should keep in constant touch with students of the schools for the blind who are com-

pleting their last year at the school. A thorough investigation, or survey, of the individual should be made in order that the individual could either be placed into gainful employment on completion of his work at the school for the blind, or that such a student could be given additional training in a field, which would have for its objective, the placing of that individual into gainful employment.

The workers for the rehabilitation agencies for the blind should have a thorough knowledge of the vocational opportunities which are offered students by the schools for the blind. The cooperative relationship between the Texas School for the Blind and the Texas State Commission for the Blind is so interdependent that if the Commission finds any new fields of employment, such information is passed on to the school in order that the school may provide additional equipment and training in these new fields. Commissions for the blind and other agencies rendering vocational rehabilitation services for the blind should keep the schools informed as to the persons placed in industry, and the type of work performed by such individuals. Such information is of paramount importance to the schools, because it gives these institutions an opportunity to enlarge the phase of vocational training.

In return, the Schools for the Blind should keep all rehabilitation agencies for the blind informed as to the qualifications which advanced students may have in regard to vocational and educational training. A complete case history of the progress of the individual in the school should be transmitted to the rehabilitation agencies for the blind when the student is ready to leave the school. Especially is it important that accurate data be kept on the vocational training which the student is receiving and his ability to grasp the various techniques in the use of tools and equipment. In other words, the agency is vitally concerned as to the knowledge a blind person may have of machinery. If the individual displays a considerable ability to repair machinery; then certainly it is feasible for the rehabilitation agency to provide additional training if necessary for this individual when his school program has been completed.

In order that these two agencies may work in the closest harmony, it is suggested that a written cooperative relationship agreement be made between the two agencies and that all information be considered strictly confidential.

The recently amended Rehabilitation Act provides for a broad physical restoration program. Before a blind person is placed into gainful employment or before such person is provided with educational training, such individual should be given a complete physical examination.

Most Schools for the Blind maintain a resident physician and an ophthamologist. The blind child is given a thorough check-up upon entering the school for the first time and all conditions needing correction are attended to. Each year as he enters again, he is once more examined and any new developments are taken care of. Should he be sick during the year, he is given immediate attention.

Here in the school is a wonderful opportunity to keep an invaluable medical history on a blind person if it is kept accurately and in detail. In a School for the Blind, which is usually the only school a blind child attends from the primary grades to graduation from high school, family might move within the confines of the state, a marvelous opportunity is regardless of where or how often his afforded to observe a student at work and at play, in sickness and in health. His well-being and physical care are not dependent on the parent's ability to provide medical attention nor on their intelligence as to the importance of providing it. Here the chronological history over a long period of time can be concentrated in one file and easily accesible.

If these records were kept accurately, this would eliminate the expense of many unnecessary medical examinations, particularly eye examinations, and would eliminate delay in beginning immediate

plans for a blind person. Then, the school would be in a position to provide the Commission with not only the information as to general health, but also to his mentality, his behavior characteristics, his ability to get along with others, his industriousness and all those many factors that should play a large part in determining a person's feasibility for further training or fitness for a particular job that might be available.

These records can be of value even though a child might not be in school any length of time. This was demonstrated recently when a girl was referred to us for training. In checking with the school, it was found that she could not be admitted because her initial examination at the time revealed that she had no sense of touch. She could not dress herself, distinguish between materials, or learn to read Braille. Without further investigation or expense for medical examination, it was easy to determine that she was not feasible for training and placement.

Of course, the value of these records depend entirely on their completeness and accuracy and the willingness of the superintendent to make the information available to the agencies rendering rehabilitation services for the blind.

Vocational Rehabilitation agencies for the Blind are having wonderful success in providing remunerative employment for blind individuals by placing them in so-called vending stands, which are in most instances, located in Municipal, County, State, and Federal Buildings. A considerable amount of assistance may be given the agencies by Schools for the Blind if the schools would encourage this type of employment. There is no doubt that this field is one of the most permanent of all phases of employment for the blind. It is suggested that each school set up a vending stand within the confines of its own school plant for the sole purpose of training operators in the field of vending stand operation. The close cooperative relationship in regard to the method of training, merchandising, and proper displaying of articles for sale, should exist between the two agencies.

Eighty per cent of the blind placed into gainful employment by the State Commission of Texas have been students who received their vocational training in the Texas School for the Blind. This would not have been possible were it not for the fact that cooperative relationship existed between these two agencies. If the blind of your institution are to be placed into employment, you must cooperate and work with the agencies who have the responsibility of placing these men and women into remunerative jobs and positions.

Rehabilitation agencies for the blind are not interested in establishing a so-called battery of tests or an aptitude test. In my opinion, an aptitude test conducted for the sole purpose of attempting to find out the type of employment which a blind person may successfully engage in is not worth a Tinker's Dam. If Schools for the Blind will give thorough training to its students in manual dexterity, the Rehabilitation Agents will certainly find a job which may be filled by a student having such training. Manual dexterity is the secret of placing this particular group of individuals into gainful employment.

The Schools for the Blind and the Rehabilitation Agencies should exercise the greatest care in providing educational opportunities for blind individuals in schools of higher learning. A considerable amount of thought should be given to the feasibility of providing such training because in too many instances the individual has been awarded a degree by a University or College, and after receiving such degree, the blind person finds that he has been trained in a field where there is no opportunity for remunerative employment. I certainly believe in providing a blind person with all the education which is necessary to make the individual employable, yet on the other hand, I do not think it feasible to provide an education to an individual when that education does not have for its objective, remunerative employment. You would not be working as an instruc-

tor for the blind, and neither would you be serving as superintendent of the State School for the Blind if you were not receiving satisfactory remunerations for your services. You may give a blind person all of the education possible, but if that education fails to provide the individual with the means to earn a decent livelihood, then you have not accomplished your objective.

VOCATIONAL SECTIONAL MEETING

W. E. ALLEN, Chairman
Texas School for the Blind

SUMMARY DISCUSSION SUMMER JOBS FOR BLIND STUDENTS

MR. PALMER, Batavia, N. Y.

New York State School for the Blind has been getting summer jobs for its students for several years to avoid having students quit school, they seek seasonal employment which ends about the time school reopens. About 80 per cent of students of 8th grade up employed this summer: 16 totally blind and 24 partially. Seniors are preferably placed in permanent jobs. Juniors generally will return in order to graduate, regardless of the nature of the employment. Of 100 students placed in 2 or 3 years, only 1 has failed to return. Placed in own community preferably. Have avoided placing students in Batavia. Canning factories good place to send students. 7 boys in one, 6 girls in another, and several others in smaller groups. School accepts no responsibility for students. Parents must sign an agreement absolving school and State Department of Education of any responsibility. School does send a housemother with each group of girls. The school pays housemothers for 12 months.

Boys pledge themselves to represent the school in a creditable fashion because of the effect it may have on other people from the school who must seek employment. School performs little supervision unles they are called in by employer.

Values of the work are self-evident. Students can get a letter of recommendation from an employer. They are placed only if their record at school gives promise of success. School refused to recommend one boy last summer; he returned to school, worked hard this year, and was placed this summer. This employment has the value of "selling" an employer on the fact that a blind person can do good work. It is not considered good to put too many blind people in a single plant, but for temporary work this can scarcely be avoided. It should not be done, however, in permanent employment.

GENERAL DISCUSSION ON NEW VOCATIONAL SUBJECTS BEING OFFERED IN SCHOOLS FOR THE BLIND

The New York Institute for the Education of the Blind reported that they have introduced a course in Printing and Bookbinding. The course in Printing is available to those boys with useful vision, while the course in Bookbinding can be followed even by totally blind students.

The New Mexico school is training girls to do laundry work by giving them experience in the school laundry. They report that two of their students are working in laundries this summer. In

Washington, D. C. girls are working in laundries this summer also, folding finished towels and other flat work as it comes from the mangles.

The Arkansas School for the Blind has introduced a course in Rabbit Husbandry this past school-year. The students carry on the work under the guidance of an instructor, feeding the rabbits, cleaning the hutches, and killing and dressing the rabbits for market. The only step in the process that they have not taken up so far is cutting up the carcasses of the animals before they are sent on to the wholesale market.

INDUSTRIAL TRAINING AT OVERBROOK

A. G. COWGILL, Principal
O. E. DAY, Placement Officer

PENNSYLVANIA INSTITUTION FOR THE INSTRUCTION OF THE BLIND

Since the feeling of usefulness to society and the ability to support oneself and one's family are major contributors to individual happiness and social adjustment, no school which has the total good of its students and society at heart can disregard the preparation of those students for self-supporting jobs. During the past eight months our Placement Department has been making a study of the occupational opportunities open to the blind of the United States, the results of which reveal that 90 per cent of all employed blind persons are engaged in the following categories: clerical, sales, inspection, machine operation, and assembly. Sixty per cent of the total group are employed as machine operators and inspectors. Accordingly, it seems imperative in training blind persons in vocational activities to recognize the changing trends in employment opportunities.

Because of out-moded equipment, vocational training courses that do not meet the requirements of employers, and insufficient specialized personnel, we are going to do the following immediately:

1. Attempt to discover and acquaint our students with their abilities, guide and help them toward the further development and best use of their abilities, and instruct them with regard to the conduct and ethics requisite for industrial employment.

2. Arrange with industrialists for their co-operation in an advisory capacity with reference to the courses of industrial training to be given at the School.

3. Expand the Training-Within-Industry Program when possible.

4. Install at the School tools, gauges, and machines which have a universal acceptance in general factory and industrial practices.

5. Employ the necessary personnel required for instruction in the foregoing.

Employment problems of the past several years have clearly shown that all schools need a much closer acquaintance with the requirements of employers. Because of the increased complexity in the job adjustment of blind persons, the school which offers them training must be especially receptive to the opinions and judgments of persons responsible for their employment.

Some outstanding blind persons can be trained within industry at no cost to the School as has been the case with ten students at our School in the last two years. By far the greater number of students require the longer training period supervised by specialized personnel, which can be offered only within the School. Because of the foregoing our Board of Managers has approved a program involving the installation of about $10,000 worth of new equipment at the

School for work-training purposes.

A class room 21' x 33' with all electrical outlets is available without the expense of additional construction. The equipment will accommodate the training of ten persons at any one time.

The services of one full time instructor in industrial machine operation, assembly, and inspection will be required and $2,100 per year has been authorized for his beginning salary with the understanding that he is to receive increased compensation for satisfactory service.

Two courses of training will be given: (a) a four-year course, totaling 540 hours of actual work-training experience for the freshmen, sophomores, juniors and seniors; (b) a one year post-graduate course totaling 540 hours of actual work-training experience, for adults and others who have left the School.

American Machinist's Handbook" and "General Shop Work" by C. C. Ashcroft

The text books to be used will be "The and J. A. G. Easton.

The students' rosters will be planned by our Principal Teacher of the Boys' School, Mr. Joseph J. Kerr.

Admission to the Industrial Training Course will be controlled by the following six factors:

1. Age.
2. Physical fitness save for blindness.
3. The innate and developed abilities of the candidate along specific and practicable lines.
4. The ambition, desire, and enthusiasm for work.
5. The ability of the candidate to get along well with his seeing fellowmen.
6. Virtual independence in traveling. We have classes in orientation.

The Placement Officer will assist the Principal in the following:

(a) Purchase and installation of equipment.

(b) Hiring and supervising of instructor.

(c) Arrange with industry for raw material to be processed.

(d) Arrange with leaders in industry to act in an advisory capacity with reference to courses of industrial training to be given.

(e) Help select candidates for training.

(f) Continue our Training-Within-Industry Program when possible.

All schools for the blind are eligible for the priorities necessary to purchase this equipment; therefore, we anticipate no difficulty in inaugurating this Program by September of 1944.

VOCATIONAL GUIDANCE IN THE

Pennsylvania Institution for the Instruction of the Blind

Philadelphia, Pennsylvania

HERBERT HARTUNG

Because of the obvious occupational limitations imposed by reduction of visual acuity, problems of vocational guidance are of peculiar importance for the visually handicapped.

The Overbrook School has been conscious of this fact for more than a quarter of a century, when a Committee of three, composed of Dr. O. H. Burritt, A. G. Cowgill and Liborio Delfino, formed a Guidance Committee, which performed commendable work for many years. This Committee functioned during the years when jobs were at a premium.

Several years ago, a Vocational Guidance Committee was appointed by Mr. A. G. Cowgill, the present Principal, to obtain all information concerning pupils to be guided. This was, in fact, a subcommittee, which submitted its findings to a committee composed of the Principal, and two Principal Teachers, who then made the final decision.

However, in 1942 it was decided that a larger Committee be appointed, to be composed of Representatives of the vari-

ous Departments of the School. The decisions of this Committee are now considered final. From year to year there are changes in Committee. This year the Committee was composed of the following: The Matron, the Director of Music, the Principal Teacher from the Girls' School, the Principal Teacher from the Boys' School, a Physicologist, our Placement Officer, two representatives from the Manual Arts Departments, the Instructor of the Commercial Department and the Principal's Secretary. Overbrook has for many years deemed it advisable to have representative former pupils, who are now teaching at the School, in Committee. The Committee, as a whole, feels that all members should have outside contacts so as to enable them to have a broader knowledge of the possibilities of guidance for the children. Freedom of discussion in committee is invited. Discussions are confidential.

Vocational Guidance is begun in the tenth grade and continued throughout the high school career of the pupils.

Influential in outlining Vocational possibilities are the various objective and subjective tests administered, including the Intelligence tests, Achievement tests, Interest tests, Personality tests and tests of Manual ability.

An interesting innovation of this school year is a Personality Rating Profile, in which all Staff Members, who come in contact with a pupil, rate him in eight Personality characteristics to compare him with the group. All this information is compiled by the Committee, which discusses each case and makes a decision in the light of the data, with special interviews with the pupils conducted by the two Principal teachers. This information is especially invaluable to the Placement Officer, who will be guided in finding suitable Vocations for the pupils after they leave the school.

The Committee makes it a point to meet at least once a month. The last three meetings place special emphasis on those who are about to embark on their several activities in life.

The Guidance Committee this year endeavored to make full use of the greater opportunities for vocations made possible by present world conditions.

PROGRAM

Thursday Afternoon, June 29

Administrators of residential schools for the blind met at two o'clock on the last day of the convention and decided to postpone consideration of a separate "Superintendents' Organization" until after the war. This had been proposed informally at a meeting of administrators of residential schools, when they met during the A. A. W. B. convention at Columbus in 1943.

A program committee of two members was elected to arrange for a special session of administrators to be held possibly a day prior to the next regular convention. They are: C. J. Settles, chairman; and J. C. Lysen, secretary. The committee was empowered to arrange with the A. A. I. B. executive committee for a time in which to hold "the superintendents' conference".

J. C. LYSEN, Sec.

Abstract of Address on COURAGE

DR. MARION A. BOGGS
Pastor Second Presbyterian Church, Little Rock

If there is one quality above another that life demands of us, that quality is courage. It can almost be said that courage is a condition of our survival. But important as courage is, it cannot be purchased in the market place. It cannot be stored up in a lock-box like money and brought forth when the occasion demands. Courage must be generated in the heart. It must be deeply woven in the very texture of the soul.

Courage is commonly thought of as a military virtue. That is perfectly natural, for if a soldier hasn't courage, he just isn't a soldier. He may know how to march in formation; he may know all about a machine gun or a rifle or other implements of war, but if he hasn't courage to do his duty under fire and carry out his assignment scornful of all risks, he lacks that one quality that makes all other qualities effective.

But it is not of the soldier's courage that I want to speak of tonight. We are seeing that on every page of the newspapers. Our officers and men are writing a brilliant chapter in American history. The courage of which I wish to speak is that which is required on the home front, in offices, in our homes, in daily work. Heroism and intrepedity above and beyond the call of duty.

Courage is a crown of ancient virtues and the first quality in the making of a man.

From the beginning of the world men and women have admired courage, built monuments to perpetuate the memory of it and to foster it in the rising generation. Primitive man developed courage to conquer his fear, to win his food, and in order to survive. Among the pagan moralists there were four cardinal virtues, and courage was the first. They were courage, justice, temperance, and wisdom. History's pages in ancient days were filled with stories of heroism told and retold, i.e. the education of young Romulus and Remus, who drank down courage from the wolf who succled them. There was the story of Horatius at the Bridge and the story of Leonidas and his Spartan warriors standing in the pass at Thermopalae.

Courage was a pre-eminent quality with the Hebrews—Moses, Joshua, and the Prophets.

Under the Christian Era courage has lost none of its ancient value or importance, but rather has been elevated and filled with moral content. It has gained in importance in the Christian system of ethics. Plato and Aristotle had early made distinction between animal courage and moral courage. They made it clear that mere fearlessness in face of danger and death was not true courage.

Reflect if you will upon the many life situations that men and women face in their journey from the cradle to the grave requiring courage.

It takes courage to face the day-after-day duties and responsibilities of business and professional life and continue, through a lifetime, to perform them with fidelity. Think of the business men who in wartime must face shortages and priorities, governmental regulations and labor troubles. Think of the ministers and teachers and social workers who deal with the imponderables of life and who cannot set down on paper just what they have accomplished during the day. The farmer who plows a field can look over the ground he has turned during the day, but the teacher has no such visible evidence of the progress of his toil. In addition to this those who toil for the "spiritually indispensable" in addition to the weight of their own per-

sonal problems, are trying to help others carry their load. We can carry these burdens of duty and responsibility very well for a time, but days of discouragement are bound to come.

It takes courage to stand up and speak out for right principles when majority sentiment is on the other side. In days of war mass sentiment is easily stirred, violent and abusive language is used and deep volcanoes of prejudice are unsealed. Race hatred can be easily stirred, and those who want to gain cheap leadership with the unthinking multitude, can ride that dangerous chariot to positions of power. It takes courage to stand up for right principles in such an hour. There is the epitaph of James Pettigrew of Charleston which illustrates this courage.

"James Louis Pettigrew of Charleston—

Unawed by opinion, unseduced by flattery, undismayed by disaster, he confronted life with antique courage and death with christian hope. In the great Civil war he withstood his people for his country; but his people did homage to the man who held his conscience higher than praise; and his country heaped her honors upon the grave of the patriot. To whom, living his own righteous self-respect sufficed alike for motive and reward."

It takes courage to face handicaps and misfortunes and ride through them to victory.

Life is an obstacle course for most of us. There is scarcely a human being anywhere who has not some handicap. But I am thinking now of that great multitude of people who must face life with the heavy mortgage of physical infirmity or some kind of deficiency—the blind, the deaf, the crippled! What courage it takes to face life with these handicaps and make something good and beautiful out of them. We applaud and glorify heroism on the battlefield, and pin medals and crosses on those who distinguish themselves for gallantry and high-hearted courage. This is as it should be, but the bravest, most courageous men and women I know are those who have faced life with some handicap and have turned their necessity into glorious gain. John Milton, George Mathewson, Helen Keller, William Wilberforce.

It takes courage to face defeat and come back fighting.

Very few men and women in the world have had uninterrupted victory all the way. Washington won the Revolutionary war, not because he won every battle, but because he never let a defeat become a disaster. Captain Callander at the Battle of Bunker Hill said "cowardice is of all crimes the most infamous in a soldier, most injurious to an army and the last to be forgiven."

"Fight on, my men," says Sir Andrew Barton, "I am hurt but I am not slain. I'll lie me down and bleed awhile and then I'll rise and fight again."

It takes courage to face changes and re-establish time-honored principles in new situations.

In the world of tomorrow the questions are going to be changed. Dogmas of the quiet past are not adequate to the stormy present. The occasion is piled high with difficulty, but we must rise to the occasion. As our case is new, we must seek anew and act anew. We must disenthrall ourselves.

It takes courage to maintain our Soul's Integrity through Days of Confusion, Uncertainty and Unrest.

Daniel Boone was asked if he was ever lost. He replied, "No, but I was bewildered once for three days." In the clash of opinion, in the cross-currents of uncertainty, darkness and gloom and calamitous days, men are bewildered.

Washington prayed for courage to maintain the character of an honest man. What are the deep sources out of which courage takes its rise? Carlyle says the heroic slumbers in every human breast.

Courage does not come by wishing to be courageous. Courage does not come by resolving to be courageous. The basic condition upon which the temple of courage is established are—

Courage takes its rise from conviction that duty and honor are more

precious than life.

Some values are so precious and some duties so important that they must be maintained, regardless of personal cost.

The belief that the service we are rendering is of value to the human race.

The conviction that the cause we represent is right, and that right in the end will prevail.

Every man's first duty is to get himself on the right side of things, for nothing is so productive of courage as consciousness of Right.

"Right is right since God is God,
And Right the day must win,
To doubt would be disloyalty,
To falter would be sin."

He will not fail nor be discouraged. Till he has established justice in earth Isles shall wait for his Law.

REPORT OF THE CREDENTIALS COMMITTEE
(List of the Delegates Present)

DR. A. L. BROWN, Chairman
Superintendent Colorado School for Deaf and Blind

Superintendents:

F. E. Davis, Arkansas School for the Blind, Little Rock, Arkansas.

A. L. Brown, Colorado School for the Blind, Colorado.

Dr. C. J. Settles, Florida School for Deaf and Blind, St. Augustine, Florida.

John S. Herndon, Georgia Academy for the Blind, Macon, Georgia.

Robert Lambert, Indiana School for the Blind, Indianapolis, Indiana.

Leslie M. Hays, Iowa School for the Blind, Vinton, Iowa.

Miss Olive Thompson, Kansas School for the Blind, Kansas City, Kansas.

Francis M. Andrews, Maryland School for the Blind, Overlea, Maryland.

Gabriel Farrell, Perkins Institution and Massachusetts School for the Blind, Watertown, Massachusetts.

Josef G. Cauffman, Michigan School for the Blind, Lansing, Michigan.

J. C. Lysen, Minnesota Braille and Sight Saving School, Faribault, Minnesota.

Robert H. Thompson, Missouri School for the Blind, St. Louis, Missouri.

John W. Eakes, Mississippi School for the Blind, Jackson, Mississippi.

G. E. Lineberry, North Carolina State School for the Blind and Deaf, Raleigh, North Carolina.

Neal F. Quimby, New Mexico School for the Blind, Alamogordo, New Mexico.

Eber L. Palmer, New York State School for the Blind, Batavia, N. Y.

Mrs. O. W. Stewart, Oklahoma School for the Blind, Muskogee, Oklahoma.

B. S. Joice, Western Pennsylvania School for the Blind, Pittsburgh, Pennsylvania.

A. G. Cowgill, Pennsylvania Institution for Instruction of the Blind, Overbrook, Philadelphia, Pennsylvania.

Richard J. Blanton, Tennessee School for the Blind, Nashville, Tennessee.

W. E. Allen, Texas School for the Blind, Austin, Texas.

Mrs. Jeanne E. Chapman, State of Washington-School for the Blind, Vancouver, Washington.

Supervisors and directors:

Alfred Allen, Hadley Correspondence School for the Blind, Winnetka, Illinois.

A. C. Ellis, American Printing House for the Blind, Louisville, Kentucky.

Board Members:

C. C. Davis, Arkansas School for the Blind, Fort Smith, Arkansas.

E. A. Stanley, Arkansas School for the Blind, Little Rock, Arkansas.

A. H. Craig, Arkansas School for the Blind, Scott, Arkansas.

T. A. Prewitt, Arkansas School for the Blind, Tiller, Arkansas.

Dr. C. C. Chesterson, Missouri School for the Blind, St. Louis, Missouri.

Mrs. Florence Robbins, New York State School for the Blind, Batavia, N. Y.

Teachers:

ALABAMA INSTITUTE FOR DEAF AND BLIND, Talladega, Alabama.
John W. Haynes, Prin.
Mrs. Emmie F. Williams

ARKANSAS SCHOOL FOR THE BLIND, Little Rock, Arkansas.
Miss Bernice Grantham
Mr. Z. T. Spikes
J. M. Woolly

ILLINOIS SCHOOL FOR THE BLIND, Jacksonville, Ill.
Miss Elizabeth Brooks, Prin.

KANSAS SCHOOL FOR THE BLIND Kansas City, Kansas.
Donald Overbeay

LOUISIANA STATE SCHOOL FOR THE BLIND, Baton Rouge, Louisiana.
W. C. Gill, Prin.
R. B. Roy
George Hitchcock

MARYLAND SCHOOL FOR THE BLIND, Overlea, Maryland.
Mr. Chiles

PERKINS INSTITUTION, Watertown, Massachusetts.
Robert S. Mealey
Allen W. Sherman, Prin.
Miss Martha L. Winget

MICHIGAN SCHOOL FOR THE BLIND, Lansing, Michigan.
Charles Buell
Miss Jean Deboer

MISSOURI SCHOOL FOR THE BLIND, St. Louis, Missouri.
Miss Marie Adzit
Mrs. E. Carpenter
H. C. Williams

MISSISSIPPI SCHOOL FOR THE BLIND, Jackson, Mississippi.
Mrs. E. E. Allen
George W. Cantin
Mrs. A. K. Hart

NEW YORK STATE SCHOOL FOR THE BLIND, Batavia, New York.
Miss Muriel Kjerstad
Mrs. Agnes Scibetta

NEW YORK INSTITUTE FOR EDUCATION OF THE BLIND, N. Y., N. Y.
Mrs. De Sanctis
Mr. Rice

OKLAHOMA SCHOOL FOR THE BLIND, Muskogee, Oklahoma.
W. C. Adair
Grace Davenport
J. Meldrun

PENNSYLVANIA INSTITUTION FOR THE INSTRUCTION OF THE BLIND, Overbrook, Philadelphia, Penn.
Herbert Hartung
J. J. Kerr, Prin. Teacher

TEXAS SCHOOL FOR THE BLIND, Austin, Texas.
F. G. Tacquard

SOUTH CAROLINA SCHOOL FOR THE DEAF AND BLIND, Cedar Spring, South Carolina.
Louise Walker, Prin.

WESTERN PENNSYLVANIA SCHOOL FOR THE BLIND, Pittsburgh, Pa.
Miss Ethel Baker
Miss May H. Levy

Honorary Members:

ARKANSAS
Ray Penix
Anna Lee Sharp
Eula Shults
Rosemary Sorrolls
Mrs. Raymond Sykes
Raymond Sykes
Katherin Edwards
Bette Dixon
Rose Fussell
Alva Howard
Emmadell High
Roy Kumpe
Miss Helen Vargo

DELAWARE
Dr. Francis J. Cummings

ILLINOIS
Miss Gretchen Stanberry

LOUISIANA
Harold E. Hein
A. C. Landry
Diedrich Ramke

MICHIGAN
Miss Blanche Scribner

MISSISSIPPI
Miss May Singletary
Mrs. J. S. Sharp

Julia Byrd
Mrs. John W. Eakes
Mrs. Mary R. Little
Mrs. George W. Cantin
George P. Ransom

MISSOURI
Rev. James C. Walker
Vivian Morris
C. F. Ruddle
Miss Nell Carr
Adeline Ruenzi

NEW JERSEY
Mary D. Campbell

OKLAHOMA
Mrs. Alice Ahren
T. R. Corr
Georgia Caldwell
Miss Nell Faulconer
Edith Holt
Mrs. Lee

TENNESSEE
Mrs. Richard J. Blanton

TEXAS
Victor Countz

WESTERN PENNSYLVANIA SCHOOL FOR THE BLIND
Mrs. B. S. Joice

SUMMARY:

Superintendent Delegates	22
Supervisor and Directors	2
Board Member Delegates	6
Teacher Delegates	35
Honorary Members	42
Total Number	107

EXECUTIVE COMMITTEE and the REPORT OF THE SECRETARY - TREASURER

JOSEF G. CAUFFMAN

The first meeting of the present Executive committee was held in Pittsburgh, Pennsylvania, June 27, 1940, for organization purposes, at which time the following business was transacted:

"Roll call was taken, with President Robert W. Woolston, Charles E. Kauffman, Mrs. R. H. Woodward, B. S. Joice and J. G. Cauffman present.
Mrs. R. H. Woodward, B. S. Joice and J. G. Cauffman present.

The Secretary reported the new officers elected, as follows:

President: Robert W. Woolston, Illinois.

Vice-President: W. G. Scarberry, Ohio.

Secretary-Treasurer: Josef G. Cauffman, Michigan.

Executive Committee: B. S. Joice, Chairman, Charles E. Kaufman, Edward H. Brayer, W. E. Allen, Mrs. R. H. Woodward.

"It was moved by Mr. Woolston, seconded by Mr. Kaufman, that the Chairman of the Executive Committee be instructed to carry on all necessary business during the interim—such as payment of bills, etc., without referring same to the Committee. Carried.

"Moved by Mrs. Woodward, seconded by Mr. Woolston, that the Secretary pay all bills.

"Moved by Mr. Joice, seconded by Mr. Woolston, that the Association continue to charge $2.50 per day for costs at the next convention. Approved.

Moved by Mr. Woolston to authorize the Secretary to have printed and distributed the necessary quantity of official stationery with the names of the new officers. Seconded by Mr. Kaufman and approved.

"Moved by Mr. Joice to authorize the Secretary to proceed with the preparation and printing of 850 copies of the Proceedings of the 35th biennial convention, at the best price he could get. Same to be distributed in accordance with

Section VII of the Constitution and By-Laws. Seconded by Mr. Woolston and approved.

"Moved by Mr. Woolston that the assessment be reduced to 20c if in the judgement of the Treasurer it be sufficient. Seconded by Mr. Kaufman. Carried.

"Moved by Mr. Woolston, seconded by Mr. Cauffman, that Miss Margaret Johnston and Miss Brace each be paid $7.50 for stenotyping and transcribing notes at the convention. Carried.

"Moved by Mr. Cauffman that the President be authorized to make necessary changes in the Vocational Guidance Committee. Seconded by Mr. Joice and carried.

"There being no further business, the meeting was adjourned."

A second meeting of the Executive Committee was held in Columbus, Ohio, on March 31, 1942, Mr. Joice reporting as follows:

"MEMBERS OF THE EXECUTIVE COMMITTEE:

"The officers of the A. A. I. B. and the chairman of the Executive Committee finally arranged a meeting at the Ohio School through the kindness of our host, Second Vice President Scarberry, and discussed the findings of the Executive Committee regarding the holding of a convention this summer.

"Secretary Cauffman was not able to be present, his boy having been very badly injured by an automobile recently but he placed his vote with the president for any approval of actions or suggestions made.

As a result of discussion the Secretary is instructed to announce to the Schools and through publications, the fact that we will not hold an A. A. I. B. conference this year. Another result being the officers' recommendation, subject to the approval of the Executive Committee, that reports of several membership committees be assembled by the Secretary, printed in pamphlet form similar to the proceedings, and distributed to the membership, on the usual quota basis.

The reports which should possibly receive the consideration of the secretary for editing and printing are as follows:

Uniform Statistical Report for Resident Schools for the Blind, Chairman Scarberry

Joint Advisory Committee, Chairman Lysen

Joint Vocational Guidance Committee, Chairman Scarberry-Meyers

Placement of Refugee Blind Children from England, Chairman Farrell

Medical Eye Care for Blind Pupils, Chairman Lineberry

Teachers' Certification Committee, Chairman Lineberry

Auditing Committee, Chairman Lambert

Report of Treasurer-Secretary, with or without audit at this time, Secretary Cauffman.

Executive Committee, Chairman Joice

Braille Committee, Chairman Andrews

Legislative Committee, Chairman Bledsoe

It was further suggested by the officers that a committee should be appointed by the president on training and rehabilitation of blinded U. S. soldiers. The president suggests the following committee:

Chairman-Scarberry
Members-Palmer
Cowgill
French
Chapman

Sincerely yours,
B. S. Joice, Chairman
Executive Committee.

March 17, 1944

Through correspondence, by order of the Chairman, Mr. B. S. Joice, the Executive Committee was canvassed on the subject of membership of the American Printing House for the Blind in the Association. A Corresponding Membership was unanimously voted, with Mr. A. C. Ellis as delegate.

The following letter was addressed to Mr. Ellis, as of even date.

"The Executive Committee of the American Association of Instructors of

the Blind has designated the American Printing House for the Blind as 'library and publisher of text books for the schools for the blind' and as such entitled to membership in the A. A. I. B., with the Superintendent of the Printing House designated as the official delegate, this membership to come under the head of corresponding membership, with full voting privileges.

March 21, 1944

In acknowledgement, Mr. Ellis replied:

Mr. Josef G. Cauffman, Secretary-Treasurer,
American Association of Instructors of the Blind,
c|o Michigan School for the Blind,
Lansing, Michigan.

Dear Mr. Cauffman:

I cannot begin to tell you how much I appreciate the fact that the Executive Committee has seen fit to give the Superintendent of the Printing House full participation in the A. A. I. B. proceedings. In the past, I have had the feeling that I was more or less a visitor at A. A. I. B. conventions. It will be good to be a part of the show from now on.

Sincerely yours,
(Signed) A. C. Ellis,
Superintendent.

Due to the war all further business was transacted by the Secretary and the Chairman of the Executive Committee by correspondence and was mainly concerned with preparation for the Watertown convention, which was postponed, and the present Little Rock conference.

The Chairman of the Executive Committee, under date of October 4, 1943, received a letter from Mr. Edward H. Brayer, principal of the Batavia School and member of the Executive Committee, that he was entering the U. S. Army October 8th and tendered his resignation as a member of the Executive Committee.

"The following explanation concerning the postponement of the 1942 convention will explain the work of the Executive Committee and is intended to be used as a Foreword in the publication of the Little Rock proceedings."

(See "Foreword")

The following is a statement of the finances of the Association from July 1, 1940 to June 30, 1944, and constitutes the Treasurer's report:

FINANCIAL STATEMENT – A. A. I. B. – 1940-1944

RECEIPTS

July 1, 1940, Cash on hand	$ 824.49	
Memberships, 1940-1944:		
44 Residential Schools—dues and assessments	1,784.00	
2 Public Schools—dues and assessments	50.50	
9 Libraries — dues	90.00	
8 Commissions and other organizations for the blind	75.00	
Sale of Proceedings	107.60	
Payment of dues in advance (Detroit Library)	5.00	2,936.59

DISBURSEMENTS

Miscellaneous Office Supplies	5.46
Printing	945.14
Postage	79.39
Binding 2 vol. of Proceedings	3.40
Exchange on Bank Draft from Puerto Rico	.35
Personal Service — 1940-42	500.00

Personal Service — 1942-44	500.00	2,033.74
		902.85

JOINT FINDINGS COMMITTEE

Received from New York Institute	125.00	
To J. C. Lysen	116.26	8.74
		$ 911.59

ACCOUNTS RECEIVABLE

Arizona School for the Blind	5.00
Kentucky School for the Blind	40.75
Chicago Public Schools	25.00
American Foundation	3.00
	$73.75

REPORT OF THE AUDITING COMMITTEE

The Auditing Committee of the American Association of Instructors of the Blind certify that the books of Josef G. Cauffman, Treasurer, have been examined and found to be correct and in order.

Robert Lambert, Chairman
Elizabeth Carpenter
John S. Herndon

June 28, 1944

REPORT OF THE RESOLUTIONS COMMITTEE

C. J. SETTLES, Chairman
President, Florida School for the Deaf and Blind
St. Augustine, Florida

RESOLVED that the 36th Biennial Convention of the American Association of Instructors of the Blind express to Mr. and Mrs. F. E. Davis our sincere appreciation for the splendid hospitality extended us during our stay here. The delightful time spent here will linger long in our memories.

RESOLVED that the Convention of the A. A. I. B. express its gratitude to the President, Robert W. Woolston, and the officers of the Association for their untiring efforts in assembling the program. We are deeply obligated to our officers for their able management of the affairs of our convention and for the splendid programs prepared and executed for our benefit and entertainment.

RESOLVED that it is a matter of gratification to the entire membership that so much has been done along research lines since the convention last met.

RESOLVED that the Convention express its gratitude to the following:

To the Board of Trustees of the Arkansas School for the gracious invitation to hold this 36th Biennial Convention in Little Rock.

To the teachers, officers and all members of the staff of the Arkansas School who have done so much to make our stay enjoyable.

To his Excellency Hon. Homer M. Adkins, Governor of the State of Arkansas, and the Rev. S. F. Bryant, President of the Arkansas Employment Service for

the Blind, Inc., for their warm addresses of welcome.

To the representatives of the State Department of Education and others for their splendid addresses and contributions to the program.

To the Little Rock Newspapers and the Press for their worthwhile reports of our meeting.

To the splendid musical talent who so ably entertained us with their musical contributions.

To Dr. Marion Boggs, Pastor, Second Presbyterian Church for his fine address.

RESOLVED that a telegram be sent to President Robert W. Woolston, Jacksonville, Illinois, and to Mrs. R. H. Woodward, Talladega, Alabama, as follows:

"Deeply regret that you are unable to be with us. The entire convention joins me in wishing you a speedy recovery."

(Signed) Josef G. Cauffman,
Secretary—A. A. I. B.

WHEREAS the medical care of eye condition of students of Schools for the Blind is of such vital importance; and

WHEREAS we feel that this Association should do all in its power to aid the different schools in doing what they can to improve all eye conditions of students; and

WHEREAS this work is likely to take several years in its accomplishment;

THEREFORE BE IT RESOLVED that a Committee on Medical Care of Eye Conditions among pupils in Schools for the Blind be made a permanent standing committee of this Association.

WHEREAS under the Constitutional provisions of this Association, membership therein is open to Schools and Libraries engaged in furthering the education of the blind; and

WHEREAS through the maintenance of its reference library, its sponsorship of special summer courses for teachers of the blind at the University of Wisconsin, the University of Washington, Western Reserve University and Hampton Institute, its co-sponsorship (with the Pennsylvania Institution for the Education of the Blind) of a special course for Home Teachers at Overbrook, and through its pioneering with the talking book in the education of the blind children, the American Foundation for the Blind is contributing substantially to those causes which this Association seeks to advance.

THEREFORE BE IT RESOLVED that the American Foundation for the Blind be designated as "Library for the Blind and Sponsor of Teachers Training Courses for the Blind" and as such is entitled to membership in the A. A. I. B. with the Executive Director of the American Foundation for the Blind designated as the official delegate. This membership to come under the head of Corresponding Membership with full voting privileges.

WHEREAS there are many trained blind graduates of the Schools for the Blind capable of becoming technicians for the purpose of assisting in the rehabilitation of blinded soldiers;

THEREFORE BE IT RESOLVED that this Association request the Surgeon General of the United States Army, Washington, D. C., to waive any standard of visual acuity which would prevent such individuals from otherwise entering the W. A. C. for this purpose. Further, that this resolution be communicated to the Surgeon General of the United States Army at Washington, D. C.

WHEREAS there are an increasing number of pupils in Schools for the Blind who have enough sight to use visual methods of education; and

WHEREAS ophthalmologists are now generally agreed that pupils having vision should be encouraged to use it: and

WHEREAS there is a definite feeling that the first steps in meeting the needs of these children is by making available suitable text books;

THEREFORE BE IT RESOLVED that this Association request the Trustees of the American Printing House for the Blind to make a study of means whereby text books in suitable type may be made available to the residential schools for

the blind and the public school braille classes which it now provides with embossed text books; and

BE IT FURTHER RESOLVED that consideration be given to the possibility of making these text books available to sight-saving classes in public schools provided that this shall not be done by the use of money now designated to provide embossed books for the blind, appliances, etc., but either by new appropriations, the use of revolving funds or through gifts and legacies.

WHEREAS there are hundreds of hand copied braille books in this country resting on the shelves of our schools for the blind, the circulating libraries, the American Red Cross headquarters, etc.;

BE IT RESOLVED that the American Foundation for the Blind be asked to compile a list of all these hand copied books and the location of the same. If, however, this appears to be too great a task we ask that at least a list of all hand copied text books be made so that the Schools for the Blind may know where such books are and can borrow the same if they are not in circulation.

WHEREAS there are in Schools for the Blind a number of children with reading disabilities and of various age levels in learning to read braille; and

WHEREAS twenty-eight of thirty-five states reporting on this problem have requested suitable literature for these pupils;

BE IT RESOLVED that the American Printing House for the Blind be asked to emboss some books with a vocabulary suited to these pupils but also on a more advanced emotional and social level, suitable to pupils of this type.

WHEREAS the Veterans Administration under Public Law No. 13, 78th Congress, was authorized to establish a program for the retraining, rehabilitation, guidance and placement of persons blinded in the war; and

WHEREAS this Association was unable to secure someone to outline the program so that consideration might be given to ways whereby through our long experience with the blind and our large resources in Schools for the Blind we might be able to help in meeting adequately this serious problem;

BE IT RESOLVED that this Association assure the Administrator of the Veterans Administration of our desire to help in this problem in any way that we can, both as a national organization and also as separate schools throughout the country, to which officers of the Veterans Administration may turn for advice, service or direct assistance to individuals in our respective areas;

BE IT FURTHER RESOLVED that this Association respectfully urge the Administrator of the Veterans Administration to expedite as rapidly as possible the establishment of a comprehensive program for blinded veterans which will enable them to find their places in normal civilian life.

WHEREAS the Office of the Surgeon General of the United States Army has undertaken the social and personal adjustment of persons blinded in the war;

BE IT RESOLVED that this Association assure the Office of the Surgeon General, U. S. A., of our desire to help in this important problem in any way we can, both as a national organization and also as separate schools through out the country to which the Army may turn for advice, services or direct assistance to individuals in our respective areas.

Respectfully submitted,

Olive I. Thompson

J. Richard Blanton

W. E. Allen

Gabriel Farrell

C. J. Settles, Chairman.

REPORT OF THE NECROLOGY COMMITTEE

J. R. BLANTON
Superintendent, Tennessee School for the Blind

(Note: Due to the fact that four years intervened between the Pittsburgh and the Little Rock Conventions, it was necessary to edit the obituaries so that all might be printed. The first two years report was submitted by Miss Annie Ruth Parr of the Iowa School—**Secretary.**)

Mr. Chairman: We have now come to the part of our program where it is appropriate that we pause to pay our tribute and respect to the memory of those who have been called from their labors to their eternal reward. Each of them, in his or her particular field, has been a help and inspiration to visually handicapped children over a number of years and has left an imprint on their lives. They have passed their TORCH to us and we must continue to carry on in the future. May we think of their memory in the words of the poet when he said:

"Great heights by some men reached and kept, were not attained by sudden flight;

But they, while their companions slept, were toiling upward through the night."

Alabama School for the Blind

Abrams, Mrs. Alonzo—A matron in the Alabama School for the Blind from September, 1938 to the time of her death in the spring of 1943, will be missed by all of her associates. She served as principal of an elementary school in Talladega for ten years prior to this work. Mrs. Abrams was deeply interested in the religious and civic welfare of the community and took an active interest in all such worthwhile endeavors.

Brockman, Ida Belle—Teacher at the Alabama School for the Blind, died on March 1, 1941. Miss Ida as she was called by her pupils, was beloved by all who knew her. She was most sympathetic and kind to all who were in distress. Miss Brockman will be sorely missed by all her many friends and pupils.

Thomason, George Milton—In the passing of George Milton Thomason on Thursday, March 19, Talladega lost one of its noblest citizens. Mr. Thomason was for many years a devoted teacher in the colored department of the Alabama Institute for Deaf and Blind. George Thomason in his seventy-four years of living made one of the outstanding successes of this community. He was a homemaker, a true father, a Christian and a fine citizen.

American Foundation for the Blind

Hamilton, William Howard—First secretary of the American Foundation for the Blind, New York City; died in Baltimore after a brief illness in November, 1941. He was well known in the social, civic, and religious life of Baltimore. He was beloved and respected alike by relatives, friends, and associates.

In addition to his local and other philanthropies, Mr. Hamilton was also a charter member of the American Foundation for the Blind. He drafted the charter and by-laws of the Foundation. He served from 1921 to 1924 as Trustee, member of the Executive Committee, and first Secretary of that organization. His resignation and remotenenss from the New York office was sincerely regretted by his associates.

American Printing House for the Blind

Barr, John Watson, Jr.—Trustee of the American Printing House for the Blind for over thirty-five years, died on March 4, 1941, in Louisville, Kentucky. He served faithfully as president of the board for twenty years. Mr. Barr gave his best efforts to a legislative program which finally resulted in ample appropriations to enable the Printing House to provide for all the schools for the blind in the United States an adequate supply of educational materials. Mr. Barr was a wise counselor, loyal friend, and an inspiring leader.

Arkansas School for the Blind

Trebing, Professor Emile—Head of the music department of the Arkansas School for the Blind for fifty-two years, passed away on June 30, 1940. He came to the Arkansas School for the Blind as Director of Music in 1888, the position he held to the time of his death. During this period of time, he gave himself in loyal and faithful service to the school.

His passing is a distinct loss to his many friends, to the school, and to the music profession.

California State Library

Foley, Kate M.—Died October 6, 1940. Miss Foley will be remembered for her volunteer home teaching which she did at her own expense for many years in Los Angeles. On July 1, 1914 she became a member of the State Library staff as home teacher for the blind of the Los Angeles area, and was transferred in 1917 to the San Francisco Bay area. Miss Foley impressed her character upon the State of California for all time. It is impossible to express in words the individuality that was hers, but anyone who ever met her has felt it and will always remember.

Clovernook Home for the Blind

Trader, Miss Georgia D.—Co-founder and for many years head of the Clovernook Home for the Blind in Cincinnati, died suddenly in that city on Sunday March 12. Miss Trader was responsible among other things, for the establishment of the Cincinnati Library Society for the Blind and the Clovernook Printing House for the Blind.

Colorado School for Deaf and Blind

Schiddel, G. W.—Piano tuning teacher at the School for eighteen years, died August 20, 1940.

Dyker Heights Home for Blind Children

Furman, Mrs. George—President of the Board of Directors of the Dyker Heights Home for Blind Children, Brooklyn, died December 23, 1941. She had served as President of the Board of Directors for the past twelve years.

Grand Rapids Association for the Blind

Griffith, Roberta A.—Died February 14, 1941. Blind herself from early childhood, Miss Griffith dedicated her life to the amelioration of the handicaps of others similarly stricken. She was a leader in national and state organizations for aid to the blind.

Miss Griffith was quite active in the rehabilitation of the blind. Among her contributions in this field was her activity in placing sightless men in charge of news and refreshment stands in public buildings.

Outstanding in the field of rehabilitation was Miss Griffith's achievement in the prevention of blindness. She was active in the organization of sight-saving classes in the public schools of Grand Rapids and also encouraged and cooperated in the organization of Braille classes.

Hadley Correspondence School for the Blind

Hadley, William A.—Founder and for fifteen years Principal of the Hadley Correspondence School for the Blind, died on October 2, following an illness of several months. He was eighty-one years old. Mr. Hadley founded the Hadley Correspondence School for the Blind after entertaining the idea that blind people might welcome an opportunity to devote their leisure hours to cultural pursuits.

In recognition of his work, Mr. Hadley was honored by Beloit College in 1931, when they conferred upon him the degree of LLD.

Illinois School for the Blind

Dewerse, Lorine—Was a beloved teacher of music in the Illinois School for the Blind from 1915 to the close of the school year in June, 1943. She died the following October. As teacher, she was a very successful leader of the girls glee club. With tender sympathy she laid the foundation in study for many of the more talented singers in the school.

Reed, Mary—Came from Minnesota to the Illinois School for the Blind and taught for two score years. She was in-

strumental in the organization of the school on a graded basis. She transferred to High School English and served in this position to June, 1940. She died August, 1940.

Lucia Orr Woolston—Wife of Robert W. Woolston, managing officer of the Illinois School for the Blind, died at the State School on December 27, 1943. Mrs. Woolston was born in Ashley, Missouri, but in her early childhood came to Jacksonville, later graduating from the Jacksonville High School and the Illinois Women's College. Trained for the teaching profession, she taught in Morgan County rural schools and was for many years on the staff of the Illinois School for the Blind.

Indiana School for the Blind

Wilson, George S.—George S. Wilson who was for thirty-six years superintendent of the Indiana School for the Blind, died on December 20 at the age of 85.

It was on January 5, 1898 that he was appointed superintendent of the Indiana School for the Blind, where he remained until 1934. On May 29, 1941, he was honored by having a tablet dedicated to him at the school which he had served for so many years.

Iowa School for the Blind

Arthaud, Miss Bess—Miss Arthaud passsed away March 1, 1944 after a six months illness. Miss Arthaud was a graduate of the Iowa School for the Blind and served as arithmetic and geography teacher in the Iowa School for a period of thirty-one years.

Hedges, Ross—Passed away March 7, 1941. Mr. Hedges was chief engineer at the school for a number of years preceding his death.

Hindman, Carl—Passed away July 24, 1943. Mr. Hindman was a graduate of the Iowa School for the Blind and served as piano tuning instructor at the school for a number of years preceding his death.

John Dibert School, New Orleans, La.

McConnell, Miss Anna Bain for 24 years teacher of our Blind Department died. She was one of the outstanding educators of the Blind. She was an honor graduate of Tulane University and was wholly consecrated to her work. She was one of the most dearly beloved women of our great city.

Louisiana

Allen, Joseph G.—Passed away on October 23, 1941. Mr. Allen was born in New Orleans on September 6, 1879. He was in attendance at the Louisiana State School until 1900 when he was appointed instructor in piano tuning and repairing in this institution.

To those who were privileged to know him intimately, Mr. Allen displayed a deep and abiding love of his fellowmen. He was particularly earnest in his desire to assist those who were visually handicapped—an earnestness which was amply attested by his many deeds of helpfulness.

Delesdernier, George, died on December 13, 1943 at the age of forty-two years. He was a graduate of the Louisiana State School for the Blind and also of the College of Osteopathy in Kirksville, Missouri. From 1931 to 1940 he was connected with the placement agency for the blind in Louisiana. During the past four years of this period, he was executive secretary of the Louisiana State Board for the Blind.

Fulton, James—Died April 23, 1942. Mr. Fulton was born in Worcester, Massachusetts on May 18, 1899. In 1922 he became an instructor in manual arts and director of physical education at the Louisiana State School for the Blind, a position which he retained until his death.

Mr. Fulton's life was full and well-rounded and he possessed a happy disposition and keen sense of humor. Service to his fellowman constituted the cardinal principle of his philosophy of life.

McConnell, Ann—Died in New Orleans in April, 1944. Miss McConnell was a graduate of the Louisiana State School for the Blind and of Newcomb College. For twenty-six years she rendered invaluable services as a teacher of visually handicapped children in the public school system of the City of New Orleans.

Maryland School for the Blind

Hinkley, Colonel John—Member of the Board of Directors of the Maryland School for the Blind from 1913 to 1940. During the twenty-seven years which he served he gave unstintingly of his time and professional knowledge. The interests of the school were always foremost in his mind and the loss of the school occasioned by his passing cannot be overestimated. We have lost a wise counsellor and friend. He died on July 18, 1940.

Pattillo, Elizabeth Chase—Formerly head of the Music Department of the Maryland School for the Blind, died in June, 1943. Her many pupils of the school and her many friends in the Association will remember her as a sincere friend and helpful contributor in the field of music.

Wright, Harry A.—Formerly Chief engineer in the Maryland State School died in August, 1941. Mr. Wright's death brought to an end many faithful years of service to this school.

Missouri

Green, Samuel McKnight—Died January 13, 1941. Superintendent Green was one who was constantly giving. He gave himself, in very large measure; and, therefore, he gave abundantly. He had a rare personality that had within itself the richness of splendid abilities, and the strength and vigor of uprightness of character with the comforting sweetness of sympathetic understanding. A former president of the A. A. I. B. his death was sincerely mourned by the entire membership which knew him so well.

Montana School for the Deaf and Blind

Kirby, Mrs. Elsie—Died October 25, 1943. For seven years she was a teacher of blind children at the Montana School for the Deaf and Blind. In the summer before her death, she taught the adult blind of Montana in the first summer school to be held at the present school location for that purpose. She filled an important place on the school staff and all her friends and associates regret her passing.

New York School for the Blind

Hamilton, Charles A.—Formerly Superintendent of the New York State School passed away in the fall of 1943. Mr. Hamilton was one of the outstanding personalities in the work for the Blind. Under his wise guidance, Batavia's school was built, its physical equipment expanded and it became one of the most modern schools in the country. In addition to holding various offices and serving on many committees of the A. A. I. B. he served well as its president during the years of 1933 and 1934. His wise counsel was always helpful to the other members of the Association.

New York State Commission for the Blind

Mehl, Dr. William M.—Chairman of the New York State Commission for the Blind died on November 28, 1941 after an illness of one month. In 1920 Dr. Mehl was appointed to the Board of the New York State Commission for the Blind and was made Chairman of the Board in 1934. He was instrumental in the passing of legislation during 1932 which permitted the leasing of newstands in city, county, and federal buildings for operation by blind persons.

Dr. Mehl was held in high esteem. His loss is shared by the medical profession and his many patients and friends. The blind pay their tribute to a gallant figure whose interest in their behalf never failed.

North Carolina School for the Blind

Lineberry, Mrs. G. E.—The devoted wife of the Superintendent, Mr. G. E. Lineberry, passed away in December, 1941 after spending many years of devoted service for the boys and girls who passed through the school. She was ever ready to assist in every phase of the program of work which her husband attempted to provide for the students and her influence will long be remembered.

Ohio School for the Blind

Rice, George N.—Instructor in the piano tuning and repair department for five years. A graduate of the Ohio State School for the Blind in 1924, and of Ohio

State University in 1928. He died July 21, 1943.

Roberts, Edward—Graduated from the Ohio State School for the Blind in 1889. In 1892 he returned to the school becoming teacher of piano tuning and repairing which position he held until his resignation September, 1938. Mr. Roberts died on the third of April, 1942.

Oklahoma

Smith, Pearl P.—Miss Smith who was in her twenty-fifth year of teaching at the Oklahoma School for the Blind, Muskogee, died April 25, 1942. As a friend, she was true and devoted. As a teacher, she was loyal and courageous and gave of her time and energies unstintingly.

Pennsylvania Institution for the Instruction of the Blind

Hutchinson, Dr. James P.—President of the Board of Managers of the Pennsylvania Institution for the Instruction of the Blind, died April 8, 1943. His long and intimate association with the school gave him a thorough knowledge of its problems, and his great interest in the work caused him to render outstanding service to the blind.

Perkins Institution

Fish, Miss Ann G.—One of the most famous people in the work for the Blind, died in May, 1942. She will be remembered for her wise guidance by hundreds of people for whom and with whom she worked at Perkins.

Fowler, Mrs. Elwin G.—The beloved wife of Elwin G. Fowler died in August, 1943. She gave the earlier years of her life to teaching the blind in England at the Royal Normal College. After her marriage the couple came to Boston and remained there, serving the pupils at Perkins for years.

Knapp, Ruth M.—Who since 1931 has been assistant librarian at Perkins Institution passed away on August 3. Miss Knapp was in charge of the Circulating library which provides reading matter to the adult blind of New England.

Monks, Mrs. George H.—Mrs. George H. Monks, a member of the Corporation of Perkins Institution and for many years a friend of the school, passed away on April 22, 1944. Mrs. Monks, a member of the Ladies Visiting Committee for the Kindergarten, has been actively interested in the kindergarten from its earliest days in Jamaica Plain. She has continued that interest throughout her life and has given many years of helpful, valuable service to the school.

O'Connor, Rev. George P.—Father O'Connor, a trustee of Perkins, died in 1943. He gave eagerly of his time and energy to advising teachers and students of the school and in aiding others with his wise counsel in directing and administering the affairs at Perkins.

Richards, Mrs. Laura E.—An author and the daughter of Dr. Samuel Gridley Howe, the distinguished educator and founder of Perkins Institution for the Blind, died at her home in Gardiner, Maine, on January 14 at the age of ninety-three years. She was named after the famous deaf-blind Laura Bridgman, who was educated by Dr. Howe. Mrs. Richards began writing in her tenth year and was still writing in her ninety-third year.

Western Pennsylvania School for the Blind

Connelly, Eugene L.—Mr. Connelly had been a member of the Board of Corporators of the Western Pennsylvania School for the Blind, from 1923-1942 and member of the Board of Directors 1931-42, second vice-president 1934-35, first vice president 1935-37, president 1937-42. He had by his gentle and quiet nature and efficient and devoted interest to the affairs of the school endeared himself to his many friends in all phases of our school life. Mr. Connelly died suddenly, January 18, 1942.

Lott, Clarence E.—Mr. Lott was a member of the Board of Corporators of the Western Pennsylvania School for the Blind from 1932-44 and Director of the School from 1934-1944. Mr. Lott set an example to all by his devotion to his duties as a director and by his enthusiastic support of the School. He died

December 18, 1943. The members of the Board of the School and the official staff expressed deep sorrow and a sense of great loss at his passing.

Turner, Ernest J.—Mr. Turner was elected Corporator of the Western Pennsylvania School for the Blind, Pittsburgh, Pennsylvania, in 1939 and Director in June 1941. His interest was not confined to the mere performance of his official duty but took the practical form of generous contributions to whatever needs he found to exist on his visits to the School. Despite the short duration of his official connections with the school he had become one of our most valuable members and had made a lasting place for himself in our affection and esteem. Mr. Turner died after a brief illness February 27, 1943.

West Virginia School for the Blind

Harris, Miss Rose—Early teacher at the school, passed away since last Necrology report of 1940.

REPORT OF THE NOMINATING COMMITTEE

The Nominating Committee of the American Association of Instructors of the Blind present the following names for the Officers and the Executive Committee for the biennium of 1944-1946:

W. G. Scarberry—President
W. E. Allen—Vice President
Josef G. Cauffman—Secretary-Treasurer
Francis Andrews—Chairman, Executive Committee
Members of the Executive Committee—
F. E. Davis, W. C. Gill, (Mrs.) Elizabeth Carpenter, Georgia Lee Abel

Respectfully submitted,
Jeanne E. Chapman, Chairman
A. C. Ellis
A. G. Cowgill
Eber L. Palmer
Donald Overbeay

Upon motion, the Secretary was instructed to cast a unanimous ballot for the slate of officers as nominated. Officers were then declared elected by Chairman, B. S. Joice.

MINUTES OF BUSINESS MEETING

At 9:00 o'clock Thursday evening, June 29, 1944, at Arkansas School for the Blind, Little Rock, a business meeting was conducted by B. S. Joice, Chairman of the Executive Committee, presiding in the absence of President Woolston and Vice President Scarberry.

Chairman Joice stated that it had been brought to the attention of the Executive Committee that there is an error of long standing of numbering our conventions and proceedings. He asked that the convention authorize the Secretary to correct this matter. (Authorization given).

The Credentials Committee report was read by A. L. Brown, Chairman. Upon motion of Gabriel Farrell, seconded by W. E. Allen, the report was unanimously accepted.

The Report of the Executive Committee and the Secretary-Treasurer was made by Josef G. Cauffman.

The Auditing Committee report was read by Mrs. Elizabeth Carpenter. Mrs. Carpenter moved that it and the Secretary-Treasurer report be accepted. Seconded by Robert E. Lambert and carried.

The Joint Advisory Committee on Research report was made by J. C. Lysen, Chairman. Moved by Gabriel Farrell and seconded by W. E. Allen that the work of the Committee be continued and the report accepted. Carried.

The Joint Vocational Guidance report of Chairman Scarberry was read by Francis M. Andrews. Moved by W. E. Allen and seconded by J. W. Haynes that the report be accepted and the Committee continued. Carried.

Committee report on Placement of Refugee Blind Children from England was made by Chairman Farrell, who moved that the report be accepted and the committee be dismissed. Seconded by C. J. Settles. Carried.

The report on the Medical Eye Care for Blind Children was made by G. E. Lineberry, Chairman. Upon motion of C. J. Settles and seconded by Gabriel Farrell the report was accepted and the work of the committee continued. (See report of Resolutions Committee.)

The Teachers Certification report was read by G. E. Lineberry, Chairman. Upon motion of Gabriel Farrell, seconded by C. J. Settles, the report was accepted and the committee continued.

The Braille Committee report was read by Francis M. Andrews, Chairman. Moved by Gabriel Farrell, seconded by C. J. Settles, that the report be accepted and the work of the committee be continued. Carried.

The progress report of the Committee on War Blinded Soldiers, by M. E. Franpton, Chairman, was read by Secretary Cauffman. Moved by C. J. Settles, seconded by Gabriel Farrell, that the report be accepted and the work of the committee be continued. Carried. Discussion on committee personnel from the floor brought a ruling from the Chairman that the President should be left free to name members to this committee and designate the chairman, as is customary in such cases.

The Committee on Literary Course of Study report was read by its Chairman, Neal Quimby. Motion to accept same and continue the work of the committee was made by C. J. Settles, seconded by A. W. Sherman. Carried.

The Necrology Committee report was made by J. R. Blanton, who moved its acceptance. Seconded by C. J. Settles and carried.

The Legislative Committee report was made by Gabriel Farrell, Chairman. Motion to accept the report and continue the work of the committee was made by Neal Quimby. Seconded by W. E. Allen and carried.

The Resolutions Committee report was made by C. J. Settles. Chairman Joice ordered the resolutions read and accepted separately.

The Resolution of Courtesy and Gratitude was accepted upon motion made by Gabriel Farrell and seconded by W. E. Allen.

The Resolution concerning the establishment of a standing committee on Medical Care of Eye Conditions among Pupils in Schools for the Blind was carried upon motion by Gabriel Farrell and seconded by W. E. Allen.

The Resolution granting Corresponding Membership in this Association to the American Foundation for the Blind, with its Executive Director as official delegate, was carried upon motion of Francis M. Andrews and seconded by W. E. Allen.

The Resolution concerning Social Security, Old Age and Survivors Insurance Plan extended to include blindness was tabled, upon motion of W. E. Allen and seconded by Francis M. Andrews. It was the opinion of the convention that as this resolution involved legislation it should be first considered by the Legislative Committee before endorsement by the Association.

The Resolution requesting the Surgeon General of the U. S. A. to waive standard of visual acuity in order to admit blind technicians in the W.A.C. was adopted upon motion of W. E. Allen, seconded by May H. Levy.

The Resolution concerning the request of the Association to the Trustees of the American Printing House regarding sight-saving text books (See report of Resolutions Committee, Proceedings) was accepted upon motion of J. C. Lysen and seconded by Francis M. Andrews.

The Resolution concerning the compilation of a master list of hand copied Braille books by the American Foundation was adopted upon motion of Francis M. Andrews and seconded by Robert W. Thompson.

The Resolution concerning embossing of books suitable for children with reading disabilities was adopted upon motion of Francis M. Andrews and seconded by A. W. Sherman.

The Resolution concerning Veterans Administration and its program of rehabilitation was adopted upon motion of W. E. Allen and seconded by Mrs. Jeanne Chapman.

The Resolution concerning offer of cooperation with the Surgeon General in his work with blind soldiers was adopted upon motion of W. E. Allen and seconded by A. G. Cowgill.

The last order of business was the report of the Nominating Committee, made by Mrs. Jeanne Chapman, Chairman.

No further business appearing Chairman Joice adjourned the 37th convention of the American Association of Instructors of the Blind.

HV1788 c.4
A
American Association of Instructors of the Blind, 1944

Date Due

HV1788 c.4
A
AUTHOR
American Association of Instruc-
TITLE
tors of the Blind, 1944

DATE LOANED	BORROWER'S NAME

AMERICAN FOUNDATION
FOR THE BLIND INC.

C.2

Proceedings of the

38th STATED MEETING

of the

AMERICAN ASSOCIATION

of

INSTRUCTORS OF THE BLIND

Held at the

Perkins Institution and
Massachusetts School for the Blind
Watertown, Massachusetts

JUNE 24-28, 1946

1853-1871: AMERICAN INSTRUCTORS OF THE BLIND
1872-1946: AMERICAN ASSOCIATION OF INSTRUCTORS OF THE BLIND

PHILADELPHIA
LYON & ARMOR, INC.

Officers for the Biennium 1944-1946

W. G. Scarberry, President
Columbus, Ohio

W. E. Allen, Vice President
Austin, Texas

Josef G. Cauffman, Secretary-Treasurer
Overbrook, Pennsylvania

EXECUTIVE COMMITTEE

Francis M. Andrews, Chairman
Overlea, Maryland

F. E. Davis
Little Rock, Arkansas

W. C. Gill
Baton Rouge, Louisiana

Mrs. Elizabeth Carpenter
St. Louis, Missouri

Miss Georgie Lee Abel
Vinton, Iowa

PREFACE

For some time past it has been evident to students using the proceedings of the American Association of Instructors of the Blind, that they were incorrectly numbered; the error occurring in 1871 at the time the name of the Association was changed. Therefore, this convention in Little Rock has authorized the Secretary to make the necessary corrections; hence these proceedings become the 37th. The word "biennial" is also omitted because of the four year interval since the last Convention. Following is a list of Conventions in their proper order:

1st meeting: August 16-18, 1853 at New York, New York.
2nd meeting: August 8-10, 1871 at Indianapolis, Indiana.
3rd meeting: August 20-22, 1872 at Boston, Massachusetts.
4th meeting: August 18-20, 1874 at Batavia, New York.
5th meeting: August 15-17, 1876 at Philadelphia, Pennsylvania.
6th meeting: August 21-23, 1878 at Columbus, Ohio.
7th meeting: August 17-19, 1880 at Louisville, Kentucky.
8th meeting: August 15-17, 1882 at Janesville, Wisconsin.
9th meeting: August 19-21, 1884 at St. Louis, Missouri.
10th meeting: July 6-8, 1886 at New York, New York.
11th meeting: July 10-12, 1888 at Baltimore, Maryland.
12th meeting: July 15-17, 1890 at Jacksonville, Florida.
13th meeting: July 5-7, 1892 at Brantford, Ontario, Canada.
14th meeting: July 17-19, 1894 at Chautauqua, New York.
15th meeting: July 14-16, 1896 at Pittsburgh, Pennsylvania.
16th meeting: July 12-14, 1898 at Lansing, Michigan.
17th meeting: July 9-11, 1902 at Raleigh, North Carolina.
18th meeting: July 20-22, 1904 at St. Louis, Missouri.
19th meeting: August 21-23, 1906 at Portland Oregon, at Vancouver, Washington and at Salem, Oregon.
20th meeting: July 14-16, 1908 at Indianapolis, Indiana.
21st meeting: June 28-July 1, 1910 at Little Rock, Arkansas.
22nd meeting: June 25-28, 1912 at Pittsburgh, Pennsylvania.
23rd meeting: June 28-30, 1915 at Berkeley, California.
24th meeting: June 4-7, 1916 at Halifax, Nova Scotia, Canada.
25th meeting: June 24-28, 1918 at Colorado Springs, Colorado.
26th meeting: June 21-25, 1920 at Overlea, Maryland.
27th meeting: June 27-30, 1922 at Austin, Texas.
28th meeting: June 23-27, 1924 at Watertown, Massacnusetts.
29th meeting: June 21-25, 1926 at Nashville, Tennessee.
30th meeting: June 25-29, 1928 at Faribault, Minnesota.
31st meeting: June 23-27, 1930 at Vancouver, Washington.
32nd meeting: June 27-July 1, 1932 at New York, New York.
33rd meeting: June 25-28, 1934 at St. Louis, Missouri.
34th meeting: June 22-25, 1936 at Raleigh, North Carolina.
35th meeting: June 27-30, 1938 at Lansing, Michigan.
36th meeting: June 24-28, 1940 at Pittsburgh, Pennsylvania.
37th meeting: June 26-30, 1944 at Little Rock, Arkansas.
38th meeting: June 24-28, 1946, at Watertown, Massachusetts.

TABLE OF CONTENTS

Page

Officers and Executive Committee 2
Preface 3
Table of Contents 4
Meeting of Superintendents and Principals 7
Reply to Address of Welcome, *Francis M. Andrews*, Superintendent, Maryland School for the Blind 8
President's Address—"Important Problems in Our Field"—*W. G. Scarberry*, Superintendent, Ohio State School for the Blind 9
"Were I To Do It Again"—*Edward E. Allen*, Director-Emeritus, Perkins Institution 13
Report of the Committee on Legislation, *Gabriel Farrell*, Chairman, Perkins Institution 16
Report of the Committee on the Rehabilitation of the War Blinded 17
Report of the Joint Advisory Committee on Research—*J. C. Lysen*, Chairman, Minnesota Braille and Sight Saving School 18
"Braille Contractions and Children's Reading Vocabularies"—A Statistical Study—*Marjorie S. Hooper*, Braille Editor, American Printing House for the Blind 18
Report of the Braille Committee—*Paul J. Langan*, Chairman, Kentucky School for the Blind 41
Report of the Committee on the Literary Course of Study—*Neal F. Quimby*, Chairman, New Mexico School for the Blind 43
Report of the Committee on A.A.I.B. Teacher Certification—*F. E. Davis*, Superintendent, Arkansas School for the Blind 45
Report of The American Printing House—*A. C. Ellis*, Superintendent 46
"Wherein Lies Our Problem"—*Howard Strickland*, Royer-Greaves School for the Blind 49
"Education for Social Living"—*Oscar E. L. Newman*, New Mexico School for the Blind 51
Report of the American Foundation for the Blind, *Dr. Robert B. Irwin*, Executive Director 55
"The Kindergarten"—*Frances F. Tredick*, Wheelock College 57
"The Life of a Kindergarten Child in the Classroom"—*Marcella J. Albrecht*, Iowa School for the Blind 61
"Blind Folk and the Written Word"—*Marie Lien*, Minnesota Braille and Sight Saving School 62
Report of Sectional Meeting—Kindergarten, First, Second, and Third Grades 65
"Map Work in the Elementary Grades"—*Mrs. Hugh D. Johnson*, Maryland School for the Blind 65
"The Introduction of Science in the Intermediate Grades"—*May Stelle*, Florida School for the Deaf and the Blind 67
Report of Sectional Meeting—Fourth, Fifth, and Sixth Grades 72
"Mathematics for High School Students in Schools for the Blind"—*Edward J. Waterhouse*, Perkins Institution 72
"Teaching English to the Blind Under the New York State Regents System"—*Byron B. Ballard*, New York State School for the Blind 74
"Teaching the Social Studies in Schools for the Blind"—*Benjamin Berinstein*, New York Institute for the Education of the Blind 76
"Scheduling and Its Relation to Guidance at the Secondary Level"—*Allan W. Sherman*, Perkins Institution 78
Report of Sectional Meeting—Senior High School 82
Report of Sectional Meeting—School Management 82
"What Schools Can Do"—*Dr. Donald D. Durrell*, Dean, School of Education, Boston University 83
"The Importance of Special Education for Negro Teachers"—*Mrs. I. M. Theus*, Principal, Louisiana State School for Negro Blind 84
"Let's Be Iconoclasts"—*E. Evans*, Perkins Institution 87

TABLE OF CONTENTS

Page

Discussion—*Dr. E. E. Allen's* Digest of His Remarks 89
"The Braille Slide Rule"—*Richard L. Montgomery*, Teachers College, Columbia University 90
"The Instruction of the Blind in Advanced Mathematics"—*Frederic T. Neumann*, Michigan School for the Blind 92
Report of Sectional Meeting—Mathematics 99
"Enriching and Extending the Science Program to Meet Post-War Needs"—*Donald Overbeay*, Principal, Kansas State School for the Blind 100
"The Need for Three Dimensional Instruction in Science Curricula"—*William T. Heisler*, Overbrook School for the Blind 103
"Science in the Elementary Grades"—*C. F. Riddle*, Missouri School for the Blind ... 105
Report of Sectional Meeting—Science 107
"Choral Music at Perkins"—*John F. Hartwell*, Perkins Institution 107
"Briefs on Teaching Music Theory"—*Edward W. Jenkins*, Perkins Institution 111
"The Tomorrow of Music Education Which Is Now Today for the Blind"—*Mabel C. Leive*, Indiana State School for the Blind 112
Report of Sectional Meeting—Music 115
"The Values of Wrestling for the Blind"—*Joseph Lyons*, Maryland School for the Blind 116
"Physical Education and More of It"—*W. E. Burrows*, Virginia School for the Blind 117
Report of Sectional Meeting—Physical Education 118
"Practical Devices for Teaching Social Studies to Blind Students"—*Ila Parent*, Louisiana State School for the Blind 118
"Social Studies on the High School Level"—*T. E. Stough*, Principal, North Carolina State School for the Blind 120
"Social Studies"—*W. Crabin Gill*, Principal, Louisiana School for the Blind 123
Report of Sectional Meeting—Social Studies 130
"Administrative Problems in a Department for the Partially Seeing in a School for the Blind"—*Georgie Lee Abel*, Principal, Iowa School for the Blind 130
"Guiding Principles in the Education of the Partially-Seeing Child"—*C. Edith Kerby*, National Society for the Prevention of Blindness 133
Report of Sectonal Meeting—Sight Saving Classes 136
"A Visual Defect of the Prematurely Born Infant"—*Theodore L. Terry, M.D.* 136
"Foot Travel at Valley Forge"—*Lt. Richard E. Hoover* 138
"What Have the Blind Been Doing During These War Years?"—*Dr. Neal F. Quimby*, Superintendent, New Mexico School for the Blind 143
"What Have the Blind Been Doing During These War Years in the Middle West?"—*Leslie M. Hays*, Superintendent, Iowa School for the Blind 144
"Diabetes Survey at Perkins"—*Dr. Ford*, U. S. Public Health Service 146
Panel Discussion on New Tests and Measurements for the Blind—*Samuel P. Hayes*, Chairman, Perkins Institution 147
"Summary of Discussion of Tests for the Blind"—*Mary K. Bauman*, Personnel Research and Guidance, Philadelphia 148
"Psychological Aptitude and Ability Tests in the Rehabilitation of the Adult Mind"—*Salvator G. Di Michael*, Office of Vocational Rehabilitation, Federal Security Agency 149
"The Testing Program at Old Farms Convalescent Hospital"—*Dr. Jacob Levine*, Consulting Psychologist 152
Report of the Credentials Committee—*Dr. A. L. Bowen*, Chairman 152
Executive Committee and the Report of the Secretary-Treasurer 157
Report of the Auditing Committee 158
Report of the Resolutions Committee 158
Report of the Necrology Committee 159
Report of the Nominating Committee 161
Business Meeting 162

MEETING OF SUPERINTENDENTS AND PRINCIPALS, JUNE 24, 1946

J. C. LYSEN, President
F. E. DAVIS, Secretary

Those present:

Donald Overbeay, Kansas
W. E. Allen, Texas
Josef G. Cauffman, Overbrook
Leslie Hayes, Iowa
Miss Georgia Lee Abel, Iowa
Frank Johns, Connecticut
Burton W. Driggs, Idaho
Francis M. Andrews, Maryland
Dr. Gabriel Farrell, Perkins
Robert Lambert, Indiana
N. C. Abbott, Nebraska
Guy Marchisio, Utah
Herbert D. Jettrey, North Dakota
Mrs. Mercedes Verdiales, Puerto Rico
Stanley Harris, West Virginia

To open the meeting Mr. Lysen presented letters from Budapest and China, asking our assistance. Letters indicated the blind in both countries were in desperate need. Question as to how we can help.

Mr. Johns stated that his state of Connecticut had had a state-wide clothing drive for the blind of Europe and China and had collected over 20,000 pounds of clothing which was packaged for shipment at the school.

Mr. Cauffman stated the blind in China are badly in need of braille slates and materials for teaching, but due to the war it would be some time before our country would be in position to supply apparatus to them on account of shortage of such materials in our own schools.

It was agreed early fall would be an excellent time to have clothing drives sponsored by civic clubs so the clothing could be sent to the countries in need before winter months.

Mr. Lysen also read a letter from El Salvador suggesting that directors and officers of schools for the blind have a meeting. It was the opinion of those present it would be a good thing to do. Dr. Farrell mentioned it might for our next meeting of A.A.I.B. be a world or an inter-American conference. It was agreed to suggest this to the new executive committee for consideration.

Brief discussion was held in regard to sight-saving books. Dr. Farrell made a brief report of surveys being made in regard to magnifying regular textbooks, making it possible to use any print book. Realizing this subject should not be discussed too fully until after the sectional meeting on sight saving, the chairman suggested we wait and discuss this after papers had been presented.

Mr. Lysen mentioned things he thought might be of interest:

(1) "Fixing" up dormitories for suitable and pleasant living quarters as well as sleeping quarters.

Mr. Driggs, planning a new building, took this opportunity to ask what should be included in a dormitory. Miss Abel suggested he might use project method to help furnish dormitories—by letting the children plan some of their furnishings and possibly they can buy some things with their earnings, etc.

Mr. Overbeay mentioned it would be well to include a beauty parlor or a well-equipped make-up room in each unit for the girls.

It was also suggested a snack bar effect with stove, etc., giving the children an opportunity to put some of their training into effect and make the dormitories more home-like.

REPLY TO ADDRESS OF WELCOME

FRANCIS M. ANDREWS
Superintendent, The Maryland School for the Blind

Mr. Hallowell, Dr. Farrell . . . it is indeed a unique position in which I find myself. For after having been principal here for seventeen years, it is a rare privilege to return and respond to the very gracious address of welcome so beautifully given us by you, Mr. Hallowell.

I am not at all surprised that we find plans completed for a most interesting visit here. Perkins is noted for doing things well. I wish to thank Dr. Farrell for his assistance in arranging for many of our speakers from Boston University, Harvard and Wheelock, who are to bring us trends in education in the schools for the seeing. Neither am I unmindful of the many, many hours which the teachers and staff of Perkins have put in planning to arrange for our comfort and pleasure. For all this the Convention is most grateful.

For many of us this is something of a home coming, for there are a goodly number of teachers in work for the blind, who have either taught at Perkins or have attended the Harvard Class and had the very great privilege of sitting under Dr. Edward E. Allen, a truly outstanding educator and friend of the blind. There are also many here who have never been to Perkins, but have hoped for that day when they could visit this famous school. I feel sure they will not be disappointed in what they find here and I hope that they may somehow grasp that indefinable something which makes the Perkins spirit.

I assure you we are looking forward to the days ahead. Thank you for inviting us.

PRESIDENT'S ADDRESS

Important Problems in our Field

W. G. SCARBERRY
Superintendent, Ohio State School for the Blind

Mr. Chairman, Ladies and Gentlemen:

We are all delighted I am sure again to assemble in this peace time convention, the first in many years. It is especially delightful to be in this historic city, a city renowned for its culture, refinement, and Boston Braves; a city which has been lauded in prose and poetry. As Samuel Bushnell stated at the Harvard Alumni dinner:

"I am from good old Boston,
The home of the bean and the cod,
Where Cabots speak only to Lowells,
And Lowells speak only to God."

However, since hearing the warm address of welcome given by Mr. Hallowell, I feel quite certain that Mr. Bushnell was only jesting when he recited the stanza to his fellow alumni members. It is indeed a special and unusual pleasure to be privileged to meet in the ivy covered halls of Perkins in which our genial host sits in his ivory tower and so inspiringly writes of the work in which we are all engaged.

We are met to discuss our common work: that of properly training the blind child. Some of our problems are old, some of the old problems have new angles, and there are new problems which have arisen within the past few years. Although we in this convention are primarily interested in the proper training of the blind child, to which work we are or ought to be sincerely devoted, nevertheless our interests are wide enough to include in our deliberations the entire field of work for the blind.

Within the past few years it has been mandatory that we in Ohio study carefully the whole question of the present and future needs of properly training the blind child. Many factors have been thoroughly investigated. If I may sound somewhat personal in my remarks please do not so interpret them that you will feel that I think I have all the answers. I do not. It just so happens that I am speaking from recent study, and expressing my convictions and my certainty that the problems of most other states are very similar indeed to our own. In preparation for a building program, the need of which has sometimes been questioned, some of the factors we have taken into consideration are as follows:

(a) Possible increases in population.
(b) Areas and possible areas of greatest density of population.
(c) An adequate prevention program.
(d) A complete analysis of enrollment data for the past twenty years in our state.
(e) Public school day class distribution and possible distribution.
(f) Adherence to dividing line between sight saving classes and blind classes; i.e. we consider for our future training program generally only those with less than 20/200 vision in the better eye after refraction.
(g) The child of borderline vision.
(h) The child with vision below 20/200 but who may be trained as a sighted child.
(i) The slow learner.

An intensive study of these subjects plus related ones of a more general nature bring us to the inescapable conclusion that we are not ready to start liquidation procedures in our schools. We need newer and better plants and equipment; we need constant revision of courses; we need to re-survey the commonly accepted objectives of education as related to the blind child; but we certainly are not headed for liquidation of the residential

blind school as some would have us believe. There is nothing so permanent and constant as change. Not all change, however, is progress—only that which leads to a proper and better solution of any problem that may be under consideration. We need not build for any appreciable enrollment expansion according to our conclusion but for:

(a) Increased educational efficiency;
(b) for wider services; e.g., a genuine preschool program and a greater summertime use of the plant in cooperation with adult agencies such as commissions and vocational rehabilitation work. I am aware that some schools use their plants for summertime work in relation to the training of the adult blind. It would seem to me that because of the new emphasis that is being placed upon training of adults all of our schools could well consider the use of their plants, equipment, and personnel to assist with this training.
(c) Special rooms and specific methods for the slow learning blind child.
(d) Special rooms and equipment for the child of borderline vision. I refer to the child whose vision is a little below or a little above 20/200 in the better eye after refraction, and who has other difficulties which make it very difficult for him to be trained by ordinary methods either as a blind child or as a sighted child.
(e) Special rooms and equipment for training the child with vision somewhat less than 20/200 but who may be educated largely as a seeing child.
(f) Surely if we are to demonstrate aggressive leadership, provision must be made in our plant for adequate study and research of many of our problems. In our opinion we should not wait for outside agencies to invent, to discover, and to adapt equipment, tests and appliances for our schools. From our experience and with our own personnel we should take the lead in all such work. It is true we all have our budgetary limitations and may not be able to have an adequate Research Department, we may feel we are exceptionally hard worked, but I have found that a little time and effort devoted to soliciting the interest of capable individuals, laboratories, and business organizations pays great dividends. A recent example of the results obtained in this way in Ohio is the development of the electronic gauge by the Timken Roller Bearing Company. Many of you are familiar with this gauge and the opportunities it presents for employing a great many sightless individuals; several are now so employed. This Company has kindly presented one to our school which is to be used in our industrial arts department. I hope the day is not far distant when we shall turn over all our special teaching devices to the printing house for manufacture and distribution, and that more time and money can be devoted to research.

My information concerning the teaching staffs and housemothers of our schools in this country leads me to make some very specific statements and recommendations regarding standards and pay. Prefacing my remarks about the teaching staff, I want to pay tribute to the housemother whose influence is so far reaching, so immeasurably important, yet who in a meeting of this kind infrequently receives little or no praise and whose salary is generally much below that of the formally trained teacher. Our experience is, and it will be duplicated in any school, that many of our former pupils upon returning for a visit will not first go to the superintendent's office nor to see some teacher but to see his former housemother who, as they say, "was a wonderful mother to me." These housemothers deserve praise, recognition, and adequate pay on a level with the teachers. Several studies have been made in recent years about teachers' salaries in schools for the blind. All these studies reveal that they are underpaid in comparison with other teachers; therefore,

the following general points are proposed for consideration of all administrators and teachers in blind schools:

(a) That new teachers must have at least the minimum preparation required by the state in which the school is located plus extra special preparation in the specific field of teaching the blind and in the specific subjects they are to teach.

(b) The single salary schedule is proposed for all teachers; i.e., grade, high school, and special teachers' pay should be based upon the amount of recognized training they have earned plus successful experience. This type of schedule, as can be readily seen, might give a primary teacher a higher salary than a high school teacher, and no person acquainted with the importance of primary teaching would object to such an arrangement. Of course, additional increments would be given members of the supervisory staff.

(c) No distinction should be made between salaries paid to men and women. I have found at least one special school that still makes such an exception, the men receiving more than the women for the same work. Salaries of all should be based upon training and experience. Some day I hope to see a salary schedule based upon merit and merit alone, when someone can properly and convincingly measure "merit."

(d) Base salaries should be equal to the salaries of regular teachers in the public school systems of the city in which the residential school is located and an increment added for the specialized work. In recent years most of our teachers have gone on with their work at a financial sacrifice and replacements have been and will be difficult to make at present salary schedules.

If the goals just mentioned are reached and adhered to we shall be better able to attract and to hold highly efficient staff members and our associates in all educational fields will look upon us with greater consideration and respect.

I am impressed by the need of greater cooperation and proper competition among schools and agencies for the blind. Perhaps because of their proximity, the eastern schools have had more competition in their area than is found in other parts of the country. Initiated by Superintendent Langan, recently between Kentucky and Ohio was held an athletic contest and in this contest there was more genuine enthusiasm and effort displayed than I have ever seen in blind school athletic contests which compete only against time and Texas. (You know Texas always wins the national field meet among schools for blind.) Competition should be extended among all schools wherever possible and in all subjects and activities. All of us need spurring on now and then because isolation and job security tend to cause us to be somewhat complacent and perhaps also lazy like the tramp found sitting in an oak tree, who, upon being questioned how he got there, yawned and said: "I don't know, must be I sat down on an acorn." Let's be careful in schools for the blind that we do not become acorn sitters.

What any school offers should be of interest to all schools, and I believe that we should use more frequently the OUTLOOK and other magazines to promulgate information about our work. Then too, as administrators and teachers, we should always be on the alert to inform others regarding our work. We have recently begun the instruction of a blinded veteran in our school. The representative of the Veterans Administration was trying to make arrangements to send him to an eastern school where the young man did not wish to go because it was so far from home. The veteran can get the same work in the Ohio School that it was planned he take in the East. Upon questioning the representative of the Veterans Administration he said that he had talked to an eastern school superintendent and had not been informed that the work could be gotten elsewhere. I believe we should be boosters for one another's schools. Cer-

tainly we should on occasion present information regarding possible offerings in other schools which would be to the advantage of the children of their specific area. Cooperation is badly needed with federal and state agencies and with private local, state and national agencies. Such agencies should be supplied with desirable data provided they can agree upon a common request form similar to the ones proposed in recent years by Mrs. Coville of the Virginia School and Miss McKay of the Foundation, and provided such data will be distributed to schools and agencies in usable form, and provided we have reasonable certainty of its validity. I am always hesitant about quoting statistics because so often they are wrong; e.g., many of the statistics we have been using about the employment of the adult blind have been rendered invalid by the successful work experiences of war years by so many blind workers. Usually when we quote statistics we become quite positive. I have always thought a good definition for positive is "being wrong in a loud and emphatic tone of voice."

While cooperating with the professional social workers in relation to our problem we should study well their theories, especially theories of those persons whose experiences begin and end with reading and conjecture. Not long ago in our state a theorizer presented a brand new theory for handling the handicapped child. The theory was challenged and the theorizer offered a position of maid or housemother for six months to test the theory. The job was not accepted, but the theoretical expoundings stopped. Too often, unfortunately, the farther we are away from the individual we are supposed to help the better we think we know how he should be helped.

Great emphasis is now being placed upon federal vocational rehabilitation of the blind. I trust the lasting results will prove as successful as the extensive organization and the cost justify and that the most roseate dreams of its promoters will materialize. Much federal money is being sent to the state programs. When federal money is sent to the states it follows that federal authority goes with it and some states' rights are lost. We must evaluate the worth of this federal money in terms of authority surrendered and services received. For years many of us have been much concerned about the trend of national legislation. Let me say and emphatically that I am unalterably opposed to any state or federal legislation that tends to take away the initiative and independence of either the blind or the sighted. If the present tendency of legislation continues, much of the American way of independence will be lost and we in schools for the blind shall have to place practically all our emphasis upon training for leisure. This we do not want and all of us should be constantly alert and carefully study any proposed legislation affecting the status of the blind.

In conclusion, ladies and gentlemen, may our deliberations be pleasant, enlightening and inspiring. May our speeches be pointed, sincere, and short. May our attempted jokes be many, salutary, and funny. May our criticisms be studied, honest and constructive. May our tempers throughout remain sweet, sunshiny and salubrious. May our social and professional contacts be renewed, strengthened, and enlarged; and may we all feel at the end of the meeting that it was indeed good for us to have been here.

"WERE I TO DO IT AGAIN"

DR. EDWARD E. ALLEN
Director-Emeritus, Perkins Institution

Mr. President and Friends of the Instructors Association:

Greetings; together with all the welcoming warmth to Perkins that a past and part-proprietor has to bestow!—

Comrades; the burden of this my paper should be answering the query suggested by its title—be an historical analysis of my career. But since it is impractical to cover in a few minutes the activities of a half century, you will doubtless pardon my limiting myself chiefly to an account of my business as builder, interspersed with sundry bits of my philosophy.

Sometimes, on being asked how I entered this field, I reply: "My mother told me in later years that in babyhood I had once been so ill with brain fever as to be temporarily blind; that she believed my good fairy had both restored my sight and dedicated my spirit to the education of blind children; and that her name must have been Faith." Factually my unsuspecting preparation for the calling began as follows, and what an introduction it was! The first blind man I came to know, Dr. Munroe of Boston, by manipulation cured me of persistent football knee; the second was he who became Sir Francis Campbell, a supreme benefactor of his fellows and one of my heroes of the darkness. Our meeting occurred hard upon my becoming tired of professional study, hence ready for an adventure abroad. Ah, but what a genius that man was, and what a Spartan, unconventional school, based on vitality, scholarships and privilege, he ran in London! My three years as usher and playground leader under him there planted in my head and heart ideals possible to blindness, that still persist. Next, as boys' master, I taught two years at South Boston and learned to understand our American less vigorous, more democratic right to an education; and what we call equality of opportunity. In 1890 the principalship of the Philadelphia Institution becoming vacant, a lady friend to whom I had providentially sent my photograph, carried it to a Vice President of the Board, whom she knew, but refrained from mentioning my age which was only 29: the bewhiskered bald-headedness of my picture indicating ample maturity. Anyway it and my considerable teaching at sister schools secured me the acting principalship. Perhaps it was the friendliness of my predecessor which saved me from hanging myself that first year. However, promotion followed.

That institution of some 200 people was then as much asylum as school. Many adults were there for piano tuning. Their leisure might be spent in chewing tobacco. Consequently the ambition of the boys was to share that privilege, down in the men's smokehouse. We had no playgrounds in which the youngsters could work off steam; so my nine years of trial and tribulation there fitted me as no softer time could have done, for the reconstruction which was to follow at Overbrook. The Managers had fully expected—in fact, they drew plans to rebuild on the old site somewhat extended. It was only President Cadwalader's insistence that finally took us out into the suburbs. Then another manager suggested adopting the California Mission style of buildings; both these procedures proving particularly fundamental to our signal success as a school. My part was supplying the specifications. Thereupon the architect built better than any of us knew. His two immense covered cloisters invited exercising early and late and in all weathers; his lovely patio gardens filled with enchantment even those pupils and teachers who couldn't see them.

You never beheld such a transformation as followed these novel and beneficent conditions. Nobody would have recognized us to be the very same pupils and staff recently vegetating in shut-in Phila-

delphia. I never dreamed that environment could achieve so much. Meanwhile, however, the departed piano tuners had been replaced by a younger generation brought in by our one-armed paragon of a field officer, Liborio Delfino. We had already added to multiple playgrounds a swimming pool and a bowling alley, yes, and even an athletic field. There youth's desire for physical prowess asserted itself, quite displacing the tobacco habit; and presently all Philadelphia flocked to see blind girls swimming and diving, also dancing on the green; then blind boys jumping and putting the shot and even racing along parallel wires. One "Overbrook Day" of outdoor and indoor general demonstration, brought a professional writer from New York, who wrote us up in the Century Magazine, as representing The New Basis in the Education of the Blind.

No: I am by no means overcoloring things and conditions. Overbrook's teamwork did usher in the new century's education of blind people, and continued to set the pace under my two successors. Sister schools, having visited us to see how we did it, realized that reconstructing in an open suburban location could do the same for them, provided they too harbored enough enthusiasm, and faith in blind youth. Presently, or within a decade—several institutions had proved it. (Read "The Significance of Overbrook," in The Teachers Forum, for September, 1932; also in the Perkins Annual Report for 1907, "The Reconstruction of Perkins a Pressing Need.")

Believe it or not, it is gospel truth that I did not wish to quit my eldorado. Salary had nothing to do with it. It was duty to my native New England and the importunities of former pupils and friends there which prevailed.

Now, as you know, the Overbrook building plan is segregate-congregate—cottage dormitories, communal kitchen and dining rooms; yet everything answering so satisfactorily that I half expected to follow a like plan in suburban Watertown. But, after careful study on the spot of the schoolhouse and family system of Dr. Howe and Mr. Anagnos (also that of Superintendent Bledsoe, near Baltimore); I specified it for the new Perkins. Only the best and most fitting would suit my purpose. Well, the drafting being over, at last, the contract was let to the lowest bidder and the excavation begun. Presently we were basking in new mansions here, on a superb site alongside the Metropolitan Park System. I had whispered to our artist architect to add touches of beauty wherever possible without extra cost. The new plant exceeded expectations!

Please note that what chiefly features us is no mere cottage or pavilion plan of dwellings, resembling the elaborate village of the blind at Chemnitz, Germany, where the inmates are marched thrice daily to commons. No, our family dwellings are severally complete and self-sufficient, each having its own kitchen and cook, each conducted by its matronly housemother who was still to arrange her own menus with the provisions ordered up daily from the steward; also to keep strict account of costs for periodical inspection (and the per capita cost of food the first year here was less than it had been in the boys' department at South Boston, which had been supplied by a single large kitchen). Yet her meals and table-setting had to be acceptable to the teacher members of her family. Each of the eight upper-school dining rooms has three small tables seating six, and one table, five pupils and a teacher, eight people, in order to accommodate housemother and occasional guests. How I used to glory dining in any family, along with some institution visitor, showing him pupils waiting on table and a squad of them afterwards washing the dishes; no servant anywhere in evidence! As to table manners, they were always good, and from habit; for obviously the mere social presence of the teachers is definitely cultural. At the old Philadelphia institution I had seen quite enough of the peripatetic teacher's supervising the pupils' meals. How they hated their unsocial job!

Thus it is that I want my staff resident, and both socially and domestically participating, their unconscious tuition and ex-

ample being, to my mind, more consequential than their classroom instruction. The teacher at the old Baltimore Institution, who had foretold that eating with her pupils according to the rearrangement would be hell, confessed to me after adequate trial, that the new way was quite as proper with non-paying pupils as it is expected to be at high priced boarding schools anywhere.

Another custom of ours, continued from earlier times, adds a feeling of belonging to the homey atmosphere of our upper-school families, and that is the non-progression of pupils from one household to another: once a Fisher girl, always a Fisher girl. This actual belonging also furthers group loyalty and inter-group emulation. Please observe the prize banners hanging in the houses!

The separate funds of the Kindergarten for Little Blind Children, which Mr. Anagnos had established at Jamaica Plain helped make practically possible our united plant here. Its lower school, two kindergarten and two primary families, are taught in distinct rooms attached to each household. If some children's disease breaks out in one cottage, work goes on there as usual; and the other cottages are not exposed.

Said a Japanese student pointing to our tower: "What for? Blind no see." I explained: "one reason is that long, low buildings need a high architectural center. Another is that the tower attracts vistors to come—see blind children working and playing—the education of the public about what the trained blind can do being a necessary half of our job. Many thousands come. Every autumn brings from Harvard and Radcliffe Colleges, huge conducted classes in social ethics."

Some of you may wonder why we possess both this great hall and a gem of a chapel. The latter was for ourselves, the upper school just filling it for the morning exercises—in New England called "prayers"—consisting of Scripture reading and singing followed by my chapel talk, always brief, never conveniently disciplinary. Everybody came; indeed, it was the inspirational opening of our school day! No participant could forget it.

To me the best-remembered feature of a famous private school in Berlin was its free-time workroom and laboratory for spontaneous motor activities. We copied the idea here; a devoted teacher of manual training being always at hand to assist. Many were the radios then to be assembled!

I had been a country boy, loving pets and the great out-of-doors. So, when a primary teacher asked to have a rabbit house, she had one next day. Her pupils went through many a baby-bunny funeral and burial. An understanding teacher of adolescent boys supervised their zoo—of laying hens, two little pigs ("Spotty" and "Mr. Rideout"); one spring a mother sheep, her lamb, and a heifer. The disciplinary effect was so marked that I dubbed animal care our most worth while extra-curricular activity for that age. Is it not true that "personal interest and self-attack are more efficacious than outside compulsion"?

Watertown, like Overbrook, inspired novel and significant undertakings—e.g., mental measurement, low-vision classes in public schools away from the atmosphere of blindness, the Harvard Course, the Foundation-Perkins joint experimental school. An agenda of the last was testing my obsession that we much too closely and unnecessarily follow the curricula and methods of the seeing, and by so doing neglect that pronunciamento of the White House Conference, which is: "The handicapped child has a right to an education so adapted to his håndicap, that he can become economically independent and have the fullest life of which he is capable." Assuming that blind children have not the reading readiness at eight that the seeing have at six, I had expected to postpone, first the use of braille for an undetermined period, and to substitute interesting oral and active education and eye-opening excursions afield; second, postponing the time, too, when reading is given priority for acquiring concepts; but finally definitely to teach how to make the reading method fundamental; in other words, to prepare every pupil before graduation,

or high school, in how to study effectively with textbooks as the instructors, American fashion.

Let me not fail to touch here upon a feature common to both my plants. While the Royal Normal College was non-coeducational, I found both the Philadelphia and the South Boston schools also segregate as to sex; and I rebuilt them so. Such separation, even among the blind and the deaf, may be old-fashioned; nevertheless, I still staunchly approve of it, as explained in my Teachers Forum paper on the Intermarriage of the Blind. My misfortune has been that in both renewals I was building for myself rather than for another who might prefer coeducation as the more American and, of course, the cheaper way. To my thinking a class of ten pupils is plenty large.

So far I have written more or less historically. Now I shall more specifically answer the caption: Were I to do it again. Obviously I should not willingly omit the London experience. It was fundamental as establishing faith in our field, for ideological background. I should not omit the Philadelphia trials and tribulations; they were a necessary schooling for Overbrook. There the only important matter omitted was conveniences for pupil contributory effort alike in the care of rooms and in other light housework. However, this was stressed at Watertown as being an invaluable part of any young people's education and training, and particularly of our young people's.

But would, could, and should I repeat the Overbrook layout today? Yes—the Watertown layout today? No—not as is, chiefly because the initial cost would be prohibitive. Still, I should gladly repeat the family system in a smaller, more selective school, use an effective auditory program (home-made records and talking books), with correspondingly fewer teachers, all of whom would be retained in proportion as they radiated the old-fashioned pre-war virtues of altruism and example.

The fundamental living system described above was one of the many inspired projects of Dr. Samuel Gridley Howe. While the continued presence of a single bad oyster will spoil the family concerned, when conducted throughout in the right spirit, the system can scarcely be bettered. That my successor approves of it, pleases me; that he has been inviting worthy and talented pupils from elsewhere to become scholarship students here, near a musical center, is indeed gratifying. Principal Van Cleve did the same in New York; his successor may do so. Individual worth and the many Gardner's Trust scholarships were the golden foundations on which the Royal Normal College rose to unprecedented eminence in service to blind people, which is what our special schools are for.

Friends, my career shaped all along as it was by favoring conditions and team work with consecrated teachers, also by the sustaining encouragement of my multitude of blind friends—all this now, in life's evening, gives me unalloyed satisfaction. I can well share Bacon's declaration: "Happy are those men whose pleasures sort with their vocations."

REPORT OF THE COMMITTEE ON LEGISLATION

GABRIEL FARRELL, Chairman
Director, Perkins Institution and Massachusetts School for the Blind

Your Committee on Legislation begs to make an informal report. There have been no meetings held during the biennial due to the difficulties of travel and, also, because no acute pieces of legislation pertaining to the school have come before the Congress. We have been alert to the problems arising, however, have studied the many pieces of legislation introduced into the Congress, and have had several communications among us as members. Mr. Andrews, Mr. Cauffman, and the Chairman, while meeting to discuss matters pertaining to the convention, discussed prob-

lems of legislation, representing as we did a majority of the committee. Several pending bills were discussed, and considerations regarding them were reported to the absent members. There seemed to be no problems which necessitated decisions or a meeting.

Most of the legislation in the Congress pertained to the revision of the Social Security Act, and these provisions pertained to the adult blind more than to the schools. More adequate information regarding these forms of legislation will be found in the report of the Committee on Legislation of the American Association of Workers for the Blind. We would like, however, to call your attention to the hearings held by the Sub-Committee of the Committee on Labor on aid to the handicapped on the House Resolution 230. Dr. Frampton, then Chairman of the Committee on Legislation, and the present Chairman gave testimony at these hearings. Full reports of the hearings have now been printed, and Part One pertains entirely to the blind.

The committee would also like to report that it has watched the creation of organizations established under two important bills reported in the last biennial, the set up of the Office of Vocational Rehabilitation provided for under Public Law 113 and the Program for the Retraining of the War Blinded established under Public Law 16.

REPORT OF THE COMMITTEE ON THE REHABILITATION OF THE WAR BLINDED

In the absence of the Chairman, Mr. Eber L. Palmer, Gabriel Farrell, originally Chairman of the committee, was asked to make a report.

Dr. Farrell stated that all were familiar with the pattern which had been established under Public Law 16. The army had centralized its blinded casualties in the East at Valley Forge General Hospital, Phoenixville, Pennsylvania, and those in the West, at Dibble General Hospital, Palo Alto, California. In July, 1944, a center was opened at Avon, Connecticut, for the social adjustment and aptitude testing of the army blinded servicemen. Practically all of the army men have passed through that center, and a program has been carried through which has proved to be reasonably effective.

The navy gathered its blinded personnel at the Naval Hospital in Philadelphia and in cooperation with the New York Institute, where groups of sailors went from time to time for testing, the navy carried its program through to completion at that center.

No official figures are yet available regarding the number and causes of blindness in the army and navy, but it is generally understood that there are approximately twelve hundred blinded soldiers and a little less than two hundred blinded sailors and marines.

Dr. Farrell reported that about a year ago the Surgeon General formed an Advisory Committee from the field of the blind. This committee met in Washington two or three times. The committee has now been transferred to the Veterans Administration and new members added to it. It has already met twice in Washington and is advising the Veterans Administration pertaining to problems of blinded veterans. The Veterans Administration is also reaching into its hospitals and homes to discover blind persons, and these are being included in the program. It is felt that this will be a helpful means of expressing the interest of the field in blinded servicemen.

Gabriel Farrell.

REPORT OF THE JOINT ADVISORY COMMITTEE ON RESEARCH

J. C. LYSEN
Superintendent, Minnesota Braille and Sight Saving School

Since it last reported to the American Association of Instructors of the Blind in 1944, the Joint Advisory Committee on Research has been inactive. Two reasons are given for this state of affairs. Committee members, because of the press of business, have had little if any time for protracted consultation. Furthermore, no funds were appropriated by either the A.A.W.B. or the A.A.I.B. for even necessary stenographic services.

Consequently, this report will be short and snappy.

It should be reported that Miss Marjorie Hooper, Braille Editor, American Printing House for the Blind, has about completed her monumental study of "Braille Contractions and Children's Reading Vocabularies." If space permits, this study should be incorporated in the Proceedings of this Convention.

This is the seventh conference to which the Joint Advisory Committee on Research has submitted a report. It will interest you to know that three members, out of a total of nine, have served continuously since the group was organized in 1938. They are Colonel E. A. Baker, Dr. Roma S. Cheek and Joseph S. Clunk. Three other members have served since 1939, namely, Robert W. Woolston, William E. Allen, and the reader of this report. Dr. A. L. Brown has been a member of the committee since 1940, Robert Lambert since 1942, and Dr. Berthold Lowenfeld since 1943.

BRAILLE CONTRACTIONS AND CHILDREN'S READING VOCABULARIES

A Statistical Study

MARJORIE S. HOOPER
Braille Editor, American Printing House for the Blind, Louisville, Kentucky

The adoption of Revised Braille Grade 1½ in 1918 gave the United States a single embossed system for the blind. The adoption of Standard English Braille in 1932 gave the English-speaking blind a universal system. Because we have a universal system of written communication, however, it does not follow that it is easy to use, either from the point of view of the reader, or from that of the writer, whether he be printer or individual. The simple fact is that Braille, wherever it is used, is not a literary system, but rather a code or shorthand system. "To learn Braille," one must not only master the alphabet and composition and punctuation signs, but one must also learn numerous contractions and abbreviations and the complicated rules which govern their use. Unlike the sighted person who employs say Gregg Shorthand in the writing of notes to be read again by himself alone, the blind person who writes his friend a Braille letter, or the hand-transcriber who embosses a book for a blind student, or a Braille stereotypist who embossed Braille plates to be used in the printing of books and magazines, must follow strict rules of usage and not indulge in the whimsies of personal interpretation, if what he writes is to be readily legible to another reader. The run-of-the-mill Braille letter with

which we are all too familiar bears fantastic witness to the difficulty of mastering Braille contractions and their rules of usage.

Having acknowledged the fact that the mastering of correct Braille is not a matter of "fascinating" entertainment, we are faced with the problems of actually teaching it. To learn Braille at an adult age, when one already has at least a fair vocabulary, both written and spoken, is quite a different problem to that of the child beginning in the first grade to learn to read and write. This study is concerned with the development of children's reading vocabularies and the relationship between vocabulary growth and the problems of learning Braille.

At the present time, there is very little accord as to the procedures to follow in teaching Braille to children. It is true, generally speaking, that advancement in the learning process proceeds fairly uniformly according to some arbitrary plan based on the gradations of Braille from Grade 1, to Grade 1½ to Grade 2. There has always been considerable variance of opinion among teachers of the blind, however, as to the proper time for the introduction of the contractions and word signs. Teachers differ widely on whether it is best to first teach Braille Grade 1 in beginning reading, or to start immediately with Revised Braille Grade 1½. Many teachers never teach Grade 1 as such, believing it is best to teach "sight reading" using the Grade 1½ contractions from the start; others prefer to teach the letters, punctuation and composition signs, and simple mathematical symbols first, reserving the learning of contractions to the second year. The adoption of Standard English Braille Grade 2 in 1932 has further complicated the situation, since there is little accord as to the proper reading grade in which to acquaint the child with the Grade 2 signs. Some teachers think that the system is too complicated for a child below the high school level; others wish to introduce Grade 2 as low as the elementary school grades.

In effect, of course, the grades of Braille employed by the American Printing House for the Blind in the embossing of books at the various school levels determine largely just how fast, and in what school grades, the various grades of Braille shall be introduced. After all, there is very little point to teaching a child to read a grade of Braille which will not be employed in the books he will read for several years thereafter. From the point of view of the printer it makes very little difference as to which grade of Braille is employed at any particular school level. Actually, the fewer the grades of Braille used, the less complicated is the process of training and developing accurate stereotypists and proofreaders. It is important, however, that the requirements of books should not vary to any extent from school to school and that the Printing House not be required to publish scores of the same texts in several different grades of Braille, thereby having to revert to the evils of duplication of texts in several embossed systems. So far as the Printing House is concerned, this problem was solved in 1940 when it adopted, on recommendation of the A.A.I.B., the following plan for the embossing of books approved for publication by its Publications Committee:

"a. **In Pre-primers and Primers,** the use of Braille Grades 1 and 1½, according to the demand from the schools; one-side, double-space printing.

"b. **In First Readers and Other First-Grade Material,** the use of Braille Grades 1 or 1½, according to the demand from the schools; interlined printing (i.e., two-side, double-space printing).

"c. **In Second Readers and Other Second-Grade Material,** the use of Braille Grade 1½, one-side, single-space printing.

"d. **In Third Grade to Junior High School Material,** the use of Braille Grade 1½; interpoint printing.

"e. **In Junior-Senior High School Material,** the use of Braille Grade 2, following the interpretations of the rules for Standard English Braille as at present (1940) set forth by the Library of Congress; interpoint printing."

At the present time, the above specifications determine the grade of Braille in which a given book may be embossed at the Printing House under the authorization of its Publications Committee.

The course of procedure outlined above provides a practical, workable plan from the standpoint of the embosser. It does not follow necessarily, however, that this plan is the most suitable from the standpoint of the blind student. Certainly, it seems illogical and a definite deterrent to ready reading ability to make it necessary that a child should have to learn many words in three different forms, first in full spelling, then in its Grade 1½ form, and still later employing Grade 2 signs. Further, the practices now followed represent only personal opinion, since the schedule outlined above was in itself based on a survey of the opinions of teachers of the blind made by the Committee on Braille of the A.A.I.B. in 1940. Nowhere in our copious literature on teaching the blind is to be found exact scientific data which can shed light on the problems of the proper level, or levels, for the introduction of the Braille contractions and abbreviations in Braille reading. It is the purpose of the present study, therefore, to attempt to determine by statistical tabulation the placement by reading grades of the individual Braille signs, and their relative usefulness compared one with another.

Procedure

Before undertaking the compilation of the material for the study, certain rules of procedure were determined. First, it was decided that each individual contraction should be examined separately without regard to its grade of Braille. This course was settled upon since it was found that, although the Braille system progresses from one Braille grade to another, the usefulness of the symbols does not necessarily follow the same pattern For instance, the words "father" and "mother," which are grade 2 signs, are among the first words learned by a small child. On the other hand, the word "knowledge," which is a simple Grade 1½ sign, does not appear in a child's vocabulary before the third school grade, while its frequency of incidence even in an adult's vocabulary is considerably less than that of "father" and "mother."

Another problem was posed by the difference in the rules for syllabication as between Revised Braille Grade 1½ and Standard English Braille Grade 2. Since Grade 1½ does not permit the overlapping of syllable divisions in the use of contractions, while Grade 2 follows the rules of sequence, it was found that there would be some instances where Grade 1½ signs might prove more useful under Grade 2 rules than those of Revised Braille. On the other hand, often a Grade 1½ sign would be discarded in favor of another sign, either Grade 1½ or 2, by the observance of the Grade 2 rules, as in the case of the word "mother," which in Grade 1½ is written "moth/er" while in Grade 2 the word has its own special Braille sign. For this reason, and because it is the ultimate goal of the Braille student to master Grade 2, the tabulations were made on the basis of Grade 2 usages.

As a basis for the tabulations, the following recognized lists of graded vocabularies were employed:

STONE'S GRADED VOCABULARY FOR PRIMARY READING, by Clarence B. Stone. (Webster Publishing Co., St. Louis, 1941.)

A COMBINED WORD LIST, compiled by B. R. Buckingham and E. W. Dolch. (Ginn & Co., Boston, 1936), which contains the results of the following graded word studies:

1. "The Commonest Words in the Spoken Vocabulary of Children up to and Including Six Years of Age," by Ernest Horn. (The Twenty-Fourth Yearbook of the National Society for the Study of Education, Part I, Chapter VII, 1925.)
2. "A Study of the Vocabulary of Children Before Entering the First Grade," by the Child Study Committee of the International Kindergarten Union. (The International Kinder-

garten Union, Washington, D. C., 1928.)

3. "Free Association Study of Children's Vocabularies," by B. R. Buckingham and E. W. Dolch. (Published in the COMBINED WORD LIST for the first time.)
4. "A Concrete Investigation of the Material of English Spelling," by W. F. Jones. (University of South Dakota, December, 1915.)
5. "A Survey of the Writing Vocabulary of Public School Children in Connecticut," by W. F. Tidyman. (United States Bureau of Education Teachers' Leaflet No. 15, November, 1921.)
6. "Common Essentials in Spelling," by C. K. Studley and Allison Ware. (Chico, California, State Normal School, **Bulletin No. 7**, 1914.)
7. "Payne-Garrison Speller," by Bruce R. Payne and S. C. Garrison. (Rand McNally & Co., Chicago, 1931.)
8. "The New Orleans Public School Spelling List," by Nicholas Bauer. (New Orleans, F. F. Hansel & Brothers, 1916.)
9. "A Basic Writing Vocabulary," by Ernest Horn. (University of Iowa Monographs in Education, First Series, No. 4, April 1, 1926.)
10. "A Reading Vocabulary for the Primary Grade," by A. I. Gates. (Teachers College, Columbia University, New York, 1926.)
11. "A Teacher's Word Book of 20,000 Words," by E. L. Thorndike. (Teachers College, Columbia University, New York, 1931.)

To those who would question the out-of-dateness of the above lists, the tabulator respectfully submits that they were the best graded word lists which could be found after diligent search at the time this study was undertaken. The results of later studies are reserved by textbook publishers for the guidance of their textbook compilers and are not available for general use by the public. Due consideration was also given to the fact that the grade placements of Braille contractions based on these lists would be conservative because of the very fact that the graded word lists were in some cases between ten and twenty years old.

In addition to the above, an original tabulation was made of the vocabularies of twenty-one reading series printed in Braille and in use in the schools and classes for the blind. The twenty-one series of readers, and the individual titles examined, are listed in the appendices. This original study was undertaken in order to verify the placement of the commonest inflectional forms, such as the derivatives formed to give the endings **ed, en, er, est, ing**, etc., which contain important contractions in the Braille system. An examination of the published graded vocabularies showed that these forms were not tabulated, being included with the root words. This original tabulation not only definitely placed these common inflectional forms in the first school grade, but also placed them near the top of the list in order of general usefulness in a Braille reader's vocabulary, be he child or adult. The more advanced derived forms, such as words ending in **ation, ity, sion, tion**, etc., are included in the published graded vocabularies, so that it was not necessary to continue the original study beyond the first school grade. For this the tabulalator is very grateful, as it is doubtful if her life would extend to the monumental age which would be required to make individual counts of an adequate number of books representative of the progressively extensive literature for the several school grades.

In addition to trying to determine the grade placements of the various Braille signs, it was felt that it would be a real advantage to place them also in order of frequency of incidence or usefulness within the various grades. It was found that those signs appearing in the vocabulary for the first school grade could be tabulated for frequency through the ratings of words which contain them in the Kindergarten Union and Gates Lists, and also the original study of the twenty-one readers series. However, frequencies were not noted in the other vocabulary lists covering words for the second school grade and

above, although it should be noted that the very appearance of a word in any vocabulary list proved its effective usefulness for any particular grade or grades. To obtain comparable information on frequencies for contractions in all grades, therefore, reference was made to the Thorndike TEACHER'S WORD BOOK OF 20,000 WORDS, which, although it does not give grade placements, is based on literature for children—classics, textbooks, newspapers, magazines, correspondence, and a wide assortment of reference and technical books. Reference to the tabulations on page 15 and in Appendix A (pages 17-30) shows the very great correlation between low grade placement and frequency of occurrence.

To compile the information about the Braille signs, all words appearing in the several vocabulary lists which contained Braille contractions or abbreviations were typed on individual 3″ x 5″ cards. Each entry word was so written as to show the individual Braille contractions which it might contain. As mentioned earlier, only the Grade 2 usages were tabulated. The grade placements for each word according to all of the vocabulary lists, plus the Thorndike ratings, were then written in on each card, as were the placements for those words which appeared in the original study of the Braille readers series for the first grade. The cards were then filed in alphabetical order for ready reference. Each card contained anywhere from one to twenty entries, with an average of about six each!

With the cards completed, the actual process of tabulating began. For easy handling, the cards were placed in file boxes, about the size of shoeboxes, with between 1,000 and 1,300 cards in each box, and the actual counts were made on the basis of the cards within the individual boxes. A total count of the cards showed that there were 13,038 words in the several lists which contained Braille signs. To those familiar with the general inadequacy of material for statistical studies in the field of the blind, because of the lack of a sufficient number of items to be examined, the results of the present study should prove conclusive.

Next, form sheets were drawn up for tabulating the counts. One sheet was designed to tabulate school grade placements as shown in the published vocabularies, as follows:

Braille sign .....

Box	Reading Grades					
No.	I	II	III	IV	V	VI
I	..	..	..	..	..	..
to	..	..	..	..	..	..
XIII	..	..	..	..	..	..

etc.

Another sheet was drawn up for frequency placements for the Kindergarten and Horn Lists, and for reading grade and frequency placements for the original study list, and a third sheet for the Thorndike ratings.

In making the tabulations, each Braille character was examined separately. Braille signs which occurred more than once in a single word were counted as many times as they appeared. Further, Braille signs which appeared as parts of other Braille signs, such as the be sign in "because," or the it sign in "its," were counted in both places. Thus, the be sign was counted both under be and under "because" (bec), etc.

One Braille sign, the abbreviated word "Braille" itself, never appeared in the tabulations. In addition, the abbreviated words "conceiving," "deceiving," "declaring," "perceiving," "receiving," and "rejoicing" (so-called biblical signs) also did not appear because they are common inflectional forms included in all of the vocabulary lists under their root word forms. They have therefore been assigned arbitrarily the grade placements and frequency ratings of their root words which, of course, are also Braille signs.

In making grade placements, the words were assigned the lowest grade levels shown for them in any of the vocabulary lists. This was done because the main purpose of this study is to determine the proper level of introduction of the individual Braille signs, and also because the various vocabulary lists themselves were compiled by different methods and were

known to err on the side of a minimum rather than a maximum vocabulary for each school grade.

A summary of the tabulations show that in the 13,038 words listed which contained Braille contractions, 180 signs appeared a total of 6,453 times in school grades I to VI inclusive, and 184 signs appeared 17,315 times in Thorndike's 20,000 WORD LIST.

Findings

With the tabulations completed, the next problem was to correlate the findings, and at this point the Braille system itself intervened to complicate the analysis. May it be said here that the 185 Braille contractions comprise no more of a homogenous group statistically (and are not therefore subject to comparison one with another without regard to formation or rules of usage) than they seem to those who must learn to use them. Basically, our Braille system is composed of three different types of signs—whole-word signs, part-word signs, and whole-or-part-word signs which also include the abbreviated words. A sign which by definition can be used as a whole word only is not comparable statistically to a part-word sign which is used in numerous words with varying grade and frequency placements. Similarly, a sign which has both whole- and part-word meanings requires separate ratings as between its use as a whole word and as a part word. Further, from the point of view of the Braillist, Braille characters are subdivided into one- or two-cell signs, and abbreviated words. It was therefore felt wise to divide the 185 signs into six groups, as follows:

	Braille Grades		
Signs	1½	2	Total
One-cell Whole-word Signs	27	9	36
One-cell Part-word Signs	11	12	23
One-cell Whole- or Part-word Signs	6	1	7
Two-cell Part-word Signs	..	14	14
Two-cell Whole- or Part-word Signs	..	32	32
Abbreviated Words	..	73	73
GRAND TOTAL	44	141	185

Of the 185 Braille signs, there are 66 one-cell contractions. Of these, 36 are one-cell whole-word signs, as follows:

as	into †	so
but	it	still
by	just	that
can	knowledge	this
child	like	to
do	more	us
enough	not	very
every	out	was
from	people	were
go	quite	will
have	rather	which
his	shall	you

All of these words have an introductory grade placement of Grade I, with the exception of the word "knowledge" which is not introduced before the third school grade. The placements of these words are contained in Appendix A. It should be noted that all of them are rated in the first 500 of Thorndike's 20,000 WORD LIST, with the exception of "quite" and "rather" which are placed in the second 500 (1b), and "knowledge" in the third 500 or first half of the second 1,000 (2a). Roughly speaking, therefore, the one-cell whole-word signs are very useful in the reading vocabularies of children in the first school grade.

The 23 one-cell part-word signs consist of the following:

ar	dis	ing *
bb	ea	ou
ble	ed *	ow
cc	en *	sh
ch	er *	st *
com	ff	th
con	gg	wh
dd	gh	

† Included here because it is always treated as a one-cell sign.
* Common inflections.

These signs, too, are largely introduced in the first school grade with the exception of the signs for **cc, com, con** and **dis,** which are introduced in the second, third, and fourth grades respectively. As a class these signs are the most useful in the entire Braille system, since they include not only letter combinations which are important in the spelling of the root forms of words, such as **ar, ch, ble, ea, ed, en, er, ou, sh,** and **st,** but also the common inflectional forms of **ed, en, er, ing, st,** etc. All but nine of the signs—**bb, ble, cc, com, con, dd, dis, ff,** and **gg**—appear in more than ten words each which are included in the first 1,000 of the Thorndike list.

There are only 7-one-cell whole- and part-word signs, as follows:

and	the	in
for	with	
of	be	

All of these signs are introduced in the first school grade. As whole words they are all extremely useful signs, consisting as they do, with the exception of the verb "be," of conjunctions, connectives, etc., and all of them appear as whole words in the first 500 of the Thorndike list. As part words all of them but **of** and **with** appear in ten or more words contained in the first 1,000 of the Thorndike list. As a part-word sign, the contraction **in** is far and away the most useful of the seven, whether when used in words of the first grade or in an adult vocabulary. On the other hand, the other six signs in their part-word usages are primarily useful in elementary or lower middle school grade vocabularies.

Of the 46 two-cell signs, there are 14 which can be used as part words only, i.e.:

ally	ity	ound
ance	less	ount
ation	ment	sion
ence	ness	tion
ful	ong	

These, of course, are the two-cell final contractions composed of their final letters preceded by either dots 4-6, 5-6, or 6. Nine of these contractions—**ance, ation, ful, ity, less, ment, ong, ound,** and **ount**—are introduced in the first reading grade because they appear in a few words of high frequency in that grade, such as the **ance** sign in "**chance**" and "**dance**," the **ful** sign in "awful" and "careful," the **ity** sign in "city," the **ong** sign in "ding-dong" and "wrong," etc. Of the other five, **ence, ness** and **tion** appear first in the second grade, **ally** in the third, and **sion** in the fourth. So far as frequency is concerned, only three of these contractions are primarily useful in the first grade—**ong, ount,** and **ound**—the remainder attaining their greatest usefulness in words of an adult level.

The remaining 32 two-cell signs may be used both as whole or part words. They consist of the so-called initial two-cell contractions composed of their beginning letters or constractions preceded by either dots 5, 4-5, or 4-5-6, and comprise the following:

cannot	name	through
character	one	time
day	ought	under
ever	part	upon
father	right	where
had	some	whose
here	spirit	word
know	their	work
lord	there	world
many	these	young
mother	those	

The grade placements and frequency ratings of the whole-word and part-word uses of these signs are startlingly different. As whole words, 28 of the 32 have grade placements in the first grade, with high Thorndike frequency ratings in the first 500 of the 20,000 Words for all but two words, **ought** and **whose**, which have Thorndike ratings in the second 500. On the other hand, these same 28 signs have varying part-word placements from the second through the sixth grades or above, while nine of them—**had, many, their, these, those, upon, whose, world** and **young**—have no part-word grade placements at all, either because they are used in combi-

nation only in adult words, or because they simply do not lend themselves to use as part words.

Three of these signs—**cannot, character,** and **lord**—are first introduced as whole words in the second grade and have Thorndike ratings in the second 500 for the first two and the first half of the second 1,000 for the third, respectively. Of these three, **cannot** does not lend itself to combination as part words; **character** is used as a part word only in adult speech although it has a reasonably low Thorndike rating of the second 1,000; while **lord,** although it first appears in words of the third school grade, has a somewhat high general Thorndike rating in the sixth thousand. The final word of this class, **spirit,** does not appear in children's reading vocabularies before the fifth grade, although it has a Thorndike rating in the second 500. Its part-word use is wholly adult, and it is probably retained in the Braille system largely because of its high incidence in the Bible.

The largest class of Braille signs, is, of course, the abbreviated words, of which there are 73. By definition, these signs can be used as whole or part words if, in the latter case, the root meaning is not changed and errors in spelling do not result. Over 65 per cent of the abbreviated words, or a total of 46, appear in the vocabulary of the first grade; 9 are words introduced in the second grade, 2 in the third, 4 in the fourth, 2 in the 5th, and 5 in the sixth. This leaves 5—**Braille** (which is peculiar to the field of the blind rather than general literature), and **conceive, conceiving, oneself** and **thyself** which are adult words. In general, the Thorndike frequency ratings for abbreviated words used as whole words are very low. Thirty-three—more than 45 per cent—of them appear in the first 500, 13 in the second 500, 16 in the second 1,000, 7 in the third 1,000, 1 in the fourth 1,000, and 1 each—**afterward** and **oneself**—in the ninth and twelfth thousand respectively.

Only 28 of the total 73 abbreviated words appeared to be used in combination as part words. Of this 28, only 16 appear as part words through the sixth grade, as follows:

Grade I	Grade II	Grade VI
after	beside	blind
again		necessary
either	Grade III	paid
good	quick	receive
him		
letter	Grade V	
little	before	
your	great	

And finally, in general it may be said that the part-word use of the abbreviated words is very slight, only four of the signs—**after, again, either,** and **him**—having a Thorndike rating as part words in the first 1,000.

Summary

And now what does all this mean in terms of the grade placement and general usefulness of the individual Braille signs? The table on page 27 gives very significant figures. Inspection of this table shows that an overwhelming majority of the signs of Standard English Braille—144—are employed in the vocabularies of children in the first school grade. Further, contractions of all types—whole words, part words, whole-and-part words, one- and two-cell signs, lower signs, and abbreviations—appear in beginning readers. Seventeen additional signs are employed first in the second grade, five in the third, six in the fourth, three in the fifth, and five in the sixth, leaving only five signs which are not used except in adult speech. With respect to high frequency of use, a total of 152 out of 185 being rated in the first 1,000 of the Thorndike list shows a very great correlation between early introduction of Braille signs in children's vocabularies and the continuous usefulness of the signs. In other words, if children in the first grade can master Standard English Braille Grade 2, most of the signs would appear often enough in their written literature to be of real use to them, while by the time they completed the third grade all but 19—and those mostly abbreviated words—would have been introduced into their general reading. Whether or not children of elementary school age can master such a large number of varying signs

and their complicated rules of usage is, of course, not a matter which can be settled in this type of study. It is hoped, however, that the facts herein set forth will prove to be a concrete basis for further investigation into the most advantageous level, or levels, at which to introduce the signs of Standard English Braille in literature for the pupils in our schools, both from the standpoint of the children who must not only learn Braille but use it, and the printer who must provide the books.

INTRODUCTORY GRADE PLACEMENTS AND THORNDIKE FREQUENCY RATINGS OF BRAILLE SIGNS

Words	INTRODUCTORY GRADE PLACEMENTS Total	I	II	III	IV	V	VI	Not Graded	THORNDIKE RATINGS † Total	1st	2nd	3rd & above	Not rated
Braille Grade 1½:													
One-Cell Whole Words	27	26	..	1	..	..	..	..	38	37	1	..	..
One-Cell Part Words	11	11	..	..	..	..	..	..	11	11	..	..	..
One-Cell Whole and Part Words:													
Whole	6	6	..	..	..	..	..	..	6	6	..	..	..
Part	(6)*	(6)*	..	..	..	..	..	..	(6)*	..	..	..	..
	44	43	..	1	..	..	..	..	44	43	1	..	..
Braille Grade 2:													
One-Cell Whole Words	9	9	..	..	..	..	..	..	9	9	..	..	..
One-Cell Part Words	12	8	1	2	1	..	..	..	12	11	1	..	..
One-Cell Whole and Part Words:													
Whole	1	1	..	..	..	..	..	..	1	1	..	..	..
Part	(1)*	(1)*	..	..	..	..	..	..	(1)*	(1)*	..	..	..
Two-Cell Part Words	14	9	3	1	1	..	..	..	14	11	3	..	..
Two-Cell Whole and Part Words:													
Whole	32	28	3	..	..	1	..	..	32	31	1	..	..
Part	(32)*	(11)*	(5)*	(2)*	(1)*	..	(2)*	(11)*	(32)*	(10)*	(4)*	(14)*	(4)*
Abbreviated Words:													
Whole	73	46	9	2	4	2	5	5	73	46	16	10	1
Part	(73)*	(8)*	(1)*	(1)*	..	(2)*	(4)*	(57)*	(73)*	(4)*	(2)*	(22)*	(45)*
	141	101	16	5	6	3	5	5	141	109	21	10	1
	185	144	17	5	6	3	5	5	185	152	22	10	1

* Figures in parentheses not counted in totals.
† In lowest thousand of incidence.

APPENDIX A

THE CONTRACTIONS OF STANDARD ENGLISH BRAILLE CLASSIFIED BY BRAILLE FORMATION AND SHOWING INTRODUCTORY READING GRADE PLACEMENTS, READING GRADE LEVELS IN WHICH SIGNS ATTAIN GREATEST USEFULNESS, AND FREQUENCY RATINGS ACCORDING TO THORNDIKE'S "20,000" WORDS

(Tabulated by Individual Words Containing Braille Contractions)

	Reading Grade Levels				Thorndike Ratings			
	Introductory Grade	Incidence in All Grades[1]	Most Useful Grade		Total Incidence[1]	Lowest Thousand		Greatest Frequency
Braille Signs	Grade	Incidence[1]	Grade	Incidence[1]		Thousand	Incidence[1]	Thousand	Incidence[1]
A. ONE-CELL WHOLE-WORD SIGNS								
as	I					1a		
but	I					1a		
by	I					1a		
can	I					1a		
child	I					1a		
do	I					1a		
enough	I					1a		
every	I					1a		
from	I					1a		
go	I					1a		
have	I					1a		
his	I					1a		
into[2]	I					1a		
it	I					1a		
just	I					1a		
knowledge	III					2a		
like	I					1a		
more	I					1a		
not	I					1a		
out	I					1a		
people	I					1a		
quite	I					1b		
rather	I					1b		
shall	I					1a		
so	I					1a		
still	I					1a		
that	I					1a		
this	I					1a		
to	I					1a		
us	I					1a		

[1] Tabulated by number of appearances of Braille signs in individual words.
[2] Included here, as is always treated as a one-cell sign.

Braille Signs	Reading Grade Levels: Introductory Grade	Introductory Grade Incidence[1]	Incidence in All Grades[1]	Most Useful Grade	Most Useful Grade Incidence[1]	Total Incidence[1]	Thorndike Ratings: Lowest Thousand	Lowest Thousand Incidence[1]	Greatest Frequency Thousand	Greatest Frequency Incidence[1]
very	I						1a			
was	I						1a			
were	I						1a			
will	I						1a			
which	I						1a			
you	I						1a			
B. ONE-CELL PART-WORD SIGNS										
ar	I	93	470	I	93	1150	1	40	16	72
bb	I	6	23	I	6	45	2	4	17	5
ble	I	15	103	V	24	394	1	4	15	30
cc	II-III	4-5	36	VI	13	95	1	1	2	9
ch	I	77	256	I	74	609	1	23	13	36
com	III	11	46	VI	15	154	1	6	8	13
con	III	10	114	VI	31	328	1	3	8-9	27 ea.
dd	I	12	45	I	12	67	1	3	9	7
dis	IV	13	53	VI	18	237	1	2	16	23
ea	I	83	309	I	83	604	1	55	1	55
ed	I	37	245	III	83	534[2]	1	11	8, 10, 11	36 ea.
en	I	97	470	VI	110	1354[2]	1	44	16	98
er	I	143	837	VI	174	2411[2]	1	54	16	144
ff	I	5	41	V	11	126	1	3	10	12
gg	I	7	29	I	7	64	1	1	11	7
gh	I	28	91	I	28	156	1	16	1	16
ing	I	51	641	III	64	309[2]	1	22	13, 17	29 ea.
ou	I	42	215	VI	53	703	1	26	6	47
ow	I	55	162	I	55	259	1	31	1	31
sh	I	50	255	II	53	512[2]	1	23	17	39
st	I	91	500	II	110	1314[2]	1	58	4	82
th	I	50	192	I	50	397	1	33	3	35
wh	I	21	41	I	21	83	1	11	1	11
C. ONE-CELL WHOLE- AND PART-WORD SIGNS										
and										
(whole)	I						1a			
(part)	I	26	86	I	26	180	1	12	8	14
be										
(whole)	I						1a			
(part)	I	10	34	I	10	117	1	12	1, 20	12 ea.

1 Tabulated by number of appearances of Braille signs in individual words.
2 Does not include inflectional forms which would greatly increase totals.

Braille Signs	Reading Grade Levels: Introductory Grade	Reading Grade Levels: Incidence in All Grades[1]	Reading Grade Levels: Most Useful Grade	Reading Grade Levels: Incidence[1]	Reading Grade Levels: Total Incidence[1]	Thorndike Ratings: Lowest Thousand	Thorndike Ratings: Incidence[1]	Thorndike Ratings: Greatest Frequency Thousand	Thorndike Ratings: Greatest Frequency Incidence[1]
C. ONE-CELL WHOLE- AND PART-WORD SIGNS									
for									
(whole)	I					1a			
(part)	I	7	68	VI	23	176	1	10	11	15
in									
(whole)	I					1a			
(part)	I	95	515	VI	128	1549	1	45	15	114
of									
(whole)	I					1a			
(part)	I	8	18	I	8	57	1	8	1	8
the									
(whole)	I					1a			
(part)	I	17	47	I	17	135	1	14	1	14
with									
(whole)	I					1a			
(part)	I	2	3	I	2	20	1	3	5	5
D. TWO-CELL PART-WORD SIGNS									
ally	III	2	7	III, VI	2 ea.	21	2	3	14	4
ance	I	2	37	VI	19	140	1	3	7	17
ation	I	5	101	VI	38	516	1	2	15	51
ence	II	3	34	V	17	145	1	1	8, 15	13 ea.
ful	I	4	56	VI	15	138	1	2	5	15
ity	I	2	36	VI	15	309	1	1	15	42
less	I	3	26	VI	13	148	2	2	13	14
ment	I	5	58	VI	22	239	1	2	5	22
ness	II	4	43	VI	18	274	1	1	17	34
ong	I	8	16	I	8	40	1	8	1	8
ound	I	8	27	I	8	50	1	6	1	6
ount	I	5	18	I, VI	5 ea.	52	1	6	1	6
sion	IV	2	33	VI	21	130	2	2	9	15
tion	II	5	79	VI	31	316	1	2	8, 15	26 ea.
E. TWO-CELL WHOLE- AND PART-WORD SIGNS									
cannot									
(whole)	II					1b			
character									
(whole)	II					2a			
(part)	..[2]		2	VIII-IX	1 ea.	3	2	1	2, 6, 8	1 ea.
day									
(whole)	I					1a			
(part)	I	10	17	I	10	12	1	1	7	3
ever									
(whole)	I					1a			
(part)	I	9	23	I	9	37	1	4	4	7

[1] Tabulated by number of appearances of Braille signs in individual words.
[2] Above sixth grade.

Braille Signs	Reading Grade Levels: Introductory Grade	Reading Grade Levels: Incidence	Reading Grade Levels: Incidence in All Grades[1]	Reading Grade Levels: Most Useful Grade	Reading Grade Levels: Incidence[1]	Total Incidence[1]	Thorndike Ratings: Lowest Thousand	Thorndike Ratings: Lowest Incidence[1]	Thorndike Ratings: Greatest Frequency Thousand	Thorndike Ratings: Greatest Frequency Incidence[1]
E. TWO-CELL WHOLE- AND PART-WORD SIGNS										
father										
(whole)	I						1a			
(part)	I	1	4	VI	2	10	3	1	12, 18	2 ea.
had										
(whole)	I						1a			
(part)	..[2]					1	4	1	4	1
here										
(whole)	I						1a			
(part)	III	1	4	VI	2	13	3	1	6, 17, 20	2 ea.
know										
(whole)	I						1a			
(part)	II	1	4	V	2	8	1a	1	16	2
lord										
(whole)	II						1b			
(part)	III	1	1	III	1	3	6	1	6, 8, 9	1 ea.
many										
(whole)	I						1a			
mother										
(whole)	I						1a			
(part)	I	1	4	III	2	6	2	1	2, 6, 7, 9, 12	1 ea.
name										
(whole)	I						1a			
(part)	II	1	3	VI	2	7	5	1	5, 6, 8, 11, 12, 14, 19	1 ea.
one										
(whole)	I						1a			
(part)	I	15	37	I	15	79	1	7	20	9
ought										
(whole)	I						1b			
(part)	I	4	12	IV	4	20	2	3	2, 11	3 ea.
part										
(whole)	I						1a			
(part)	I	5	13	I	5	36	1	1	2	4
right										
(whole)	I						1a			
(part)	II	2	10	V	4	22	1	2	5, 12	3 ea.
some										
(whole)	I						1a			
(part)	I	3	12	I, V	3 ea.	30	1	1	13, 15	4 ea.
spirit										
(whole)	V						1b			
(part)	..[2]					9	4	1	20	2

[1] Tabulated by number of appearances of Braille signs in individual words.
[2] Above sixth grade.

Braille Signs	Reading Grade Levels: Introductory Grade		Reading Grade Levels: Incidence in All Grades[1]	Reading Grade Levels: Most Useful Grade		Total Incidence[1]	Thorndike Ratings: Lowest Thousand		Thorndike Ratings: Greatest Frequency	
	Grade	Incidence[1]		Grade	Incidence[1]		Thousand	Incidence[1]	Thousand	Incidence[1]
E. TWO-CELL WHOLE- AND PART-WORD SIGNS										
their										
(whole)	I						1a			
(part)	..[2]					1	5	1	5	1
there										
(whole)	I						1a			
(part)	IV	1	4	VI	3	14	1	1	4, 6, 11	2 ea.
these										
(whole)	I						1a			
those										
(whole)	I						1a			
through										
(whole)	I						1a			
(part)	VI	1	1	VI	1	1	2	1	2	1
time										
(whole)	I						1a			
(part)	II	2	10	III	3	17	1	1	8	4
under										
(whole)	I						1a			
(part)	I	2	13	VI	4	42	1	1	18	6
upon										
(whole)	I						1a			
(part)	..[2]					2	4	1	4, 7	1 ea.
where										
(whole)	I						1a			
(part)	I	2	6	I, II, V	2 ea.	19	3	2	4	5
whose										
(whole)	I						1b			
(part)	..[2]					1	12	1	12	1
word										
(whole)	I						1a			
(part)	VI	1	1	VI	1	6	11	1	20	2
work										
(whole)	I						1a			
(part)	II	2	6	II	2	27	3	1	11, 17, 19	4 ea.
world										
(whole)	I						1a			
(part)	..[2]					3	5	1	5, 17, 18	1 ea.
young										
(whole)	I						1a			
(part)	..[2]					2	11	1	11, 16	1 ea.
F. ABBREVIATED WORDS										
about										
(whole)	I						1a			
(part)	..[2]					5	11	2	11, 14	2 ea.

[1] Tabulated by number of appearances of Braille signs in individual words.
[2] Above sixth grade.

Braille Signs	Reading Grade Levels: Introductory Grade	Reading Grade Levels: Incidence	Reading Grade Levels: Incidence in All Grades[1]	Reading Grade Levels: Most Useful Grade	Reading Grade Levels: Incidence[1]	Total Incidence[1]	Thorndike Ratings: Lowest Thousand	Thorndike Ratings: Lowest Thousand Incidence[1]	Thorndike Ratings: Greatest Frequency Thousand	Thorndike Ratings: Greatest Frequency Incidence[1]
F. ABBREVIATED WORDS										
above										
(whole)	I						1a			
according										
(whole)	IV						2a			
(part)	..[2]					1	3b	1	3b	1
across										
(whole)	I						1a			
after										
(whole)	I						1a			
(part)	I	1	4	I, II, IV, V	1 ea.	4	1b	1	1, 5, 16, 19	1 ea.
afterward										
(whole)	II						9			
(part)	..[2]					1	2a	1	2a	1
again										
(whole)	I						1a			
(part)	I	1	1	I	1	1	1a	1	1a	1
against										
(whole)	I						1a			
almost										
(whole)	I						1a			
already										
(whole)	I						1b			
also										
(whole)	I						1a			
although										
(whole)	I						1b			
altogether										
(whole)	I						3b			
always										
(whole)	I						1a			
because										
(whole)	I						1a			
before										
(whole)	I						1a			
(part)	V	1	1	IV	1	1	5b	1	5b	1
behind										
(whole)	I						1a			
(part)	..[2]					1	20	1	20	1
below										
(whole)	II						2a			
beneath										
(whole)	II						2a			

1 Tabulated by number of appearances of Braille signs in individual words.
2 Above sixth grade.

Braille Signs	Reading Grade Levels: Introductory Grade	Reading Grade Levels: Incidence in All Grades[1]	Reading Grade Levels: Most Useful Grade	Reading Grade Levels: Total Incidence[1]	Thorndike Ratings: Lowest Thousand	Thorndike Ratings: Lowest Thousand Incidence[1]	Thorndike Ratings: Greatest Frequency Thousand	Thorndike Ratings: Greatest Frequency Incidence[1]
	Grade	Incidence[1]	Grade	Incidence[1]				
F. ABBREVIATED WORDS								
beside								
(whole)	I				1b			
(part)	II	1	II	1	1	4b	1	4b	1
between								
(whole)	I				1a			
beyond								
(whole)	II				2b			
blind								
(whole)	I				1b			
(part)	VI	1	VI	1	3	5b	1	5b, 9, 15	1 ea.
braille								
(whole)	..[3]				..[3]			
children								
(whole)	I				1a			
(part)	..[2]				1	14	1	14	1
conceive								
(whole)	..[2]				3b			
conceiving								
(whole)	..[2]				3b			
could								
(whole)	I				1a			
(part)	..[2]				1	3a	1	3a	1
deceive								
(whole)	V				2b			
(part)	..[2]				2	10	1	10, 20	1 ea.
deceiving								
(whole)	V				2b			
declare								
(whole)	III				2a			
declaring								
(whole)	III				2a			
either								
(whole)	I				1b			
(part)	I	1	I	1	1	1b	1	1b	1
good								
(whole)	I				1a			
(part)	I	5	I	5	10	3	3	3	3
great								
(whole)	I				1a			
(part)	V	2	V	2	2	4	1	4, 17	1 ea.
herself								
(whole)	I				1b			
him								
(whole)	I				1a			
(part)	I	1	I	1	1	1a	1	1a	1

[1] Tabulated by number of appearances of Braille signs in individual words.
[2] Above sixth grade.

Braille Signs	Reading Grade Levels: Introductory Grade	Inci- dence[1]	Inci- dence in All Grades[1]	Most Useful Grade	Inci- dence[1]	Total Inci- dence[1]	Thorndike Ratings: Lowest Thousand	Inci- dence[1]	Greatest Frequency Thou- sand	Inci- dence[1]
F. ABBREVIATED WORDS										
himself (whole)	I						1a			
immediate (whole)	IV						2a			
its (whole)	I						1a			
itself (whole)	I						2a			
letter (whole)	I						1a			
(part)	III	1	3	VI	2	2	11	1	11, 15	1 ea.
little (whole)	I						1a			
(part)	III	1	1	III	1	2	17	1	17, 20	1 ea.
much (whole)	I						1a			
(part)	..[2]					4	8	1	8, 9, 12, 17	1 ea.
must (whole)	I						1a			
myself (whole)	I						1b			
necessary (whole)	IV						1b			
(part)	VI	1	1	VI	1	1	5b	1	5b	1
neither (whole)	I						1b			
o'clock (whole)	I						2a			
oneself (whole)	..[2]						12			
ourselves (whole)	I						3a			
paid (whole)	II						2a			
(part)	VI	2	2	VI	2	3	6	1	6, 10, 11	1 ea.
perceive (whole)	VI						3a			
(part)	..[2]					1	15	1	15	1
perceiving (whole)	..[2]						3a			
perhaps (whole)	II						1b			

[1] Tabulated by number of appearances of Braille signs in individual words.
[2] Above sixth grade.

Braille Signs	Reading Grade Levels: Introductory Grade		Reading Grade Levels: Incidence in All Grades[1]	Reading Grade Levels: Most Useful Grade	Reading Grade Levels: Incidence[1]	Total Incidence[1]	Thorndike Ratings: Lowest Thousand	Thorndike Ratings: Incidence[1]	Thorndike Ratings: Greatest Frequency Thousand	Thorndike Ratings: Greatest Frequency Incidence[1]
	Grade	Incidence[1]		Grade						
F. ABBREVIATED WORDS										
quick										
(whole)	I									
(part)	III	1	2	III, VI	1 ea.	4	1a 4a	1	4, 12, 14, 15	1 ea.
receive										
(whole)	II									
(part)	VI	1	1	VI	1	1	1a 7	1	7	1
receiving										
(whole)	II						1a			
rejoice										
(whole)	VI						2a			
rejoicing										
(whole)	VI						2a			
said										
(whole)	I									
(part)	..[2]					1	1a 14	1	14	1
should										
(whole)	I									
(part)	..[2]					1	1b 10	1	10	1
such										
(whole)	I						1a			
themselves										
(whole)	II						1b			
thyself										
(whole)	..[2]						3b			
today										
(whole)	I						1a			
together										
(whole)	I						1a			
tomorrow										
(whole)	I						1b			
tonight										
(whole)	I						2b			
would										
(whole)	I						1a			
(part)	..[2]					1	7	1	7	1
your										
(whole)	I						1a			
(part)	I	2	3	I	2	3	2a	1	2a, 3b, 4b	1 ea.
yourself										
(whole)	I						2a			
yourselves										
(whole)	VI						4b			

[1] Tabulated by number of appearances of Braille signs in individual words.
[2] Above sixth grade.

APPENDIX B

INTRODUCTORY GRADE PLACEMENTS OF STANDARD ENGLISH BRAILLE CONTRACTIONS SHOWING THORNDIKE PLACEMENTS BY LOWEST THOUSAND AND BY THOUSAND OF GREATEST USEFULNESS

Braille Signs	Thorndike Ratings: Lowest Thousand	Thorndike Ratings: Most Useful Thousand
	Grade I	
about (wh)	1a	
above (wh)	1a	
across (wh)	1a	
after (wh)	1a	
(pt)	1b	1b, 5, 16, 19
again (wh)	1a	
(pt)	1a	
against (wh)	1a	
almost (wh)	1a	
also (wh)	1a	
always (wh)	1a	
already (wh)	1b	
although (wh)	1b	
ance	1	7
and (wh)	1a	
(pt)	1	8
ar	1	16
as	1a	
ation	1	15
be (wh)	1a	
(pt)	1	1, 20
because (wh)	1a	
before (wh)	1a	
behind (wh)	1a	
beside (wh)	1b	
between (wh)	1a	
ble	1	15
blind (wh)	1b	
but	1a	
by	1a	
can	1a	
ch	1	13
child	la	
children (wh)	1a	
could (wh)	1a	
day (wh)	1a	
(pt)	1	7
dd	1	9
do	1a	
ea	1	1
ed	1	8, 10, 11
either (wh)	1b	
(pt)	1b	1b
en	1	16
enough	1a	
er	1	16
ever (wh)	1a	
(pt)	1	4
every	1a	
father (wh)	1a	
ff	1	10
for (wh)	1a	
(pt)	1	11
from	1a	
ful	1	5
gg	1	11
gh	1	1
go	1a	
good (wh)	1a	
great (wh)	1a	
had (wh)	1a	
have	1a	
here (wh)	1a	
herself (wh)	1b	
him (wh)	1a	
(pt)	1a	1a
himself (wh)	1a	
his	1a	
in (wh)	1a	
(pt)	1	15
ing	1	13, 17
into	1a	
it	1a	
its (wh)	1a	
ity	1	15
just	1a	
know (wh)	1a	
(pt)	1a	16
letter (wh)	1a	
like	1a	
little (wh)	1a	
many (wh)	1a	
ment	1	5
more	1a	
mother (wh)	1a	

Braille Signs	Thorndike Ratings: Lowest Thousand	Thorndike Ratings: Most Useful Thousand
much (wh)	1a	
must (wh)	1a	
myself (wh)	1b	
name (wh)	1a	
neither (wh)	1b	
ness	1	17
not	1a	
of (wh)	1a	
(pt)	1	1
one (wh)	1a	
(pt)	1	20
ong	1	1
ou	1	6
ought (wh)	1b	
ound	1	1
ount	1	1
out	1a	
ow	1	1
part (wh)	1a	
(pt)	1	2
people	1a	
quick (wh)	1a	
quite	1b	
rather	1b	
right (wh)	1a	
said (wh)	1a	
sh	1	17
shall	1a	
should (wh)	1b	
so	1a	
some (wh)	1a	
(pt)	1	13, 15
st	1	4
still	1a	
such (wh)	1a	
th	1	3
that	1a	
the (wh)	1a	
(pt)	1	1
their (wh)	1a	
there (wh)	1a	
these (wh)	1a	
this	1a	
those (wh)	1a	
through (wh)	1a	
time (wh)	1a	
tion	1	8, 15
to	1a	
today (wh)	1a	
together (wh)	1a	
tomorrow (wh)	1b	
under (wh)	1a	
(pt)	1	18
upon (wh)	1a	
us	1a	
very	1a	
was	1a	
were	1a	
wh	1	1
where (wh)	1a	
which	1a	
whose (wh)	1b	
will	1a	
with (wh)	1a	
(pt)	1	5
word (wh)	1a	
work (wh)	1a	
world (wh)	1a	
would (wh)	1a	
you	1a	
young (wh)	1a	
your (wh)	1a	
bb	2	17
itself (wh)	2a	
less	2	13
mother (pt)	2	2, 6, 7, 9, 12
ought (pt)	2	2, 11
o'clock (wh)	2a	
sion	2	9
your (pt)	2a	2a, 3b, 4a
yourself (wh)	2a	
altogether (wh)	3b	
father (pt)	3	12, 18
good (pt)	3	3
ourselves (wh)	3a	
where (pt)	3	4
Grade II		
cannot (wh)	1b	
cc	1	2
ence	1	8, 15
know (pt)	1a	16
lord (wh)	1b	
ness	1	17
perhaps (wh)	1b	
receive (wh)	1a	

Braille Signs	Thorndike Ratings: Lowest Thousand	Thorndike Ratings: Most Useful Thousand
receiving (wh)	1a	
right (pt)	1	5, 12
themselves (wh)	1b	
tion	1	8, 15
below (wh)	2a	
beneath (wh)	2a	
beyond (wh)	2b	
character (wh)	2a	
paid (wh)	2a	
work (pt)	3	11, 17, 19
beside (pt)	4b	4b
name (pt)	5	5, 6, 8, 11, 12
afterward (wh)	9	
Grade III		
com	1	8
con	1	8, 9
ally	2	14
declare (wh)	2a	
declaring (wh)	2a	
knowledge	2a	
here (pt)	3	6, 7, 20
quick (pt)	4a	4a, 12, 14, 15
lord (pt)	6	6, 8, 9
letter (pt)	11	11, 15
little (pt)	17	17, 20
Grade IV		
dis	1	16
necessary (wh)	1b	
there (pt)	1	4, 6, 11
according (wh)	2a	
immediate (wh)	2a	

Braille Signs	Thorndike Ratings: Lowest Thousand	Thorndike Ratings: Most Useful Thousand
Grade V		
deceive (wh)	2b	
deceiving (wh)	2b	
great (pt)	4	4, 17
before (pt)	5b	5b
spirit (wh)	20	
Grade VI		
blind	1b	5b, 9, 15
rejoice (wh)	2a	
rejoicing (wh)	2a	
through (pt)	2	2
perceive (wh)	3a	
perceiving (wh)	3a	
yourselves (wh)	4b	
necessary (pt)	5b	5b
paid (pt)	6	6, 10, 11
receive (pt)	7	7
word (pt)	11	20
Above Grade VI Or Not Placed in Lists		
afterward (pt)	2a	
according (pt)	3b	3b
conceive (wh)	3b	
conceiving (wh)	3b	
could (pt)	3a	3a
thyself (wh)	3b	
upon (pt)	4	7
world (pt)	5	5, 17, 18
would (pt)	7	7
should (pt)	10	10
about (pt)	11	11, 14
young (pt)	11	11, 16
oneself (wh)	12	
whose (pt)	12	12
said (pt)	14	14
behind (pt)	20	20
Braille (wh)	..	..
their (pt)	5	5

APPENDIX C

TWENTY-ONE READERS SERIES EXAMINED IN ORIGINAL STUDY
(With dates of copyright for individual titles)

ALICE AND JERRY BOOKS (Reading Foundation Series). O'Donnell, et al. Row, Peterson & Co., Evanston:
READINESS PRE-PRIMER — HAPPY DAYS. 1938.
FIRST PRE-PRIMER — RIDES AND SLIDES. 1936.
SECOND PRE-PRIMER — HERE AND THERE. 1936.
PRIMER — DAY IN AND DAY OUT. 1936.
FIRST READER — ROUND ABOUT. 1936.
PARALLEL FIRST READER — ANYTHING CAN HAPPEN. 1940.

BRAILLE READING SERIES. Ellis, et al. N.Y.I.E.B., New York, 1941:
PART I—SALLY AND TIM.
PART II—FUN WITH SALLY AND TIM.
PART III—SALLY AND TIM AT WORK AND PLAY.

DAILY LIFE ARITHMETIC SERIES. Buswell, et al. Ginn & Co., Boston, 1937:
JOLLY NUMBER TALES: BOOK I.

DEMOCRACY READERS. Nemec. Macmillan Co., New York, 1940:
PRIMER—SCHOOL FRIENDS.
FIRST READER — LET'S TAKE TURNS.

EASY GROWTH IN READING SERIES. Hildreth, et al. John C. Winston Co., Philadelphia, 1940:
PRE-PRIMER, LEVEL ONE — MAC AND MUFF.
PRE-PRIMER, LEVEL TWO — THE TWINS, TOM AND DON.
PRE-PRIMER, LEVEL THREE — GOING TO SCHOOL.
PRIMER LEVEL ONE—AT PLAY.
PRIMER, LEVEL TWO — FUN IN STORY.
FIRST READER, LEVEL ONE — I KNOW A SECRET.
FIRST READER, LEVEL TWO—GOOD STORIES.

ELSON BASIC READERS (Life-Reading Service). Elson, et al. Scott, Foresman & Co., Chicago, 1930:
PRE-PRIMER.
PRIMER.
BOOK ONE.

FRIENDLY HOUR SERIES. Leavell, et al. American Book Co., New York, 1935:
PRIMER—BEN AND ALICE.
BOOK ONE—PLAYMATES.

GUIDANCE IN READING SERIES. Storm. Lyons & Carnahan, Chicago, 1936:
PRE-PRIMER—NIP AND TUCK.
PRIMER—BOB AND JUDY.
BOOK I—GOOD TIMES TOGETHER.

HAPPY HOUR READERS. English and Alexander. Johnson Publishing Co., Richmond, Va., 1935:
PRIMER—JO-BOY (Not Brailled, but examined).
FIRST READER—GOOD FRIENDS.

HEALTH STORIES (Curriculum Foundation Series). Towse, et al. Scott, Foresman & Co., Chicago, 1933:
BOOK ONE.

NATURE ACTIVITY READERS SERIES. Edwards and Sherman. Little, Brown & Co., Boston, 1931:
BOOK I—THE OUTDOOR LAND.

NEW CITIZENSHIP READERS. Ringer, et al. J. B. Lippincott Co., Philadelphia, 1940:
PRE-PRIMER—A HAPPY DAY.
PRIMER—DAVID AND JOAN.
BOOK I—CITY AND COUNTRY.

NEW PATHWAYS IN SCIENCE. Craig, et al. Ginn & Co., Boston, 1940:
BOOK I—WE FIND OUT.

NEW SILENT READERS (A Basal Activity Series). Lewis, et al. John C. Winston Co., Philadelphia:
PRE-PRIMER — TOTS AND TOYS. 1931, 1936.
PRIMER — PETS AND PLAYMATES. 1931, 1936.
BOOK I—GROWING UP. 1931.

NEW WORK-PLAY BOOKS. Gates, et al. Macmillan Co., New York, 1939:
PRE-PRIMER—OFF WE GO.
PRIMER—JIM AND JUDY.
BOOK I—DOWN OUR STREET.

OUR ANIMAL BOOKS (A series in humane education). Sondergaard, et al. D. C. Heath & Co., Boston, 1937:
PRIMER—FUZZY TAIL.
BOOK I—SNIFF.

ROAD TO SAFETY READERS; rev. and enl. Buckley, et al. American Book Co., New York, 1938, 1942:
A—PRE-PRIMER—AWAY WE GO.
B—PRIMER—HAPPY TIMES.
C—BOOK I—IN STORM AND SUNSHINE.

SAFE AND HEALTHY LIVING SERIES. Andress, et al. Ginn & Co., Boston, 1939, 1941:
BOOK I—SPICK AND SPAN.

SCIENCE STORIES (Curriculum Foundation Series). Beauchamp, et al. Scott, Foresman & Co., Chicago, 1933:
BOOK I.

WONDER-STORY BOOKS (Reading Foundation Series). Huber, et al. Row, Peterson & Co., Evanston, 1938:
FIRST READER—I KNOW A STORY.

WORK-PLAY BOOKS. Gates and Huber. Macmillan, New York, 1930:
PRIMER— PETER AND PEGGY.
FIRST READER—ROUND THE YEAR.

REPORT OF THE BRAILLE COMMITTEE

The Braille Committee of the A.A.I.B. was activated in January of this year by appointment of the President of the Association. Such a short life of six months prior to the Convention has limited the amount of work accomplished and presented herewith in this report.

However, this committee did succeed in holding a meeting in April, which five of the seven members attended. It was felt that because of the importance of the duties of our committee more work could be achieved through such a meeting rather than depending on the usual questionnaire type of report. Therefore, this paper represents a series of discussions by the members of the committee, and admits that the statements made herein represent the opinions of only three of our schools. The other two members of our committee represent the American Printing House for the Blind, and the American Foundation for the Blind. Without further apology, therefore, the committee presents the following report to this Convention for consideration.

Assuming the obligation inherited from the Little Rock Convention, the Braille Committee felt the problem of the "where," "when," and "why" of Grade Two Braille was uppermost in the minds of most teachers of Braille in our schools. The rule of thumb followed by most teachers and most schools would seem to be a rather unprofessional method of introducing Grade Two Braille to students. It has been found that schools at present are familiarizing students with the signs and contractions of Grade Two Braille anywhere from the third grade to the junior high school level.

Little or no actual research has been submitted for advancing a theory of early introduction over the present method, or, for that matter, of ignoring the contractions until high school level, when most teachers think or feel the student has reached the "ready" or "receptive" stage. Our books arbitrarily have been set up at the present grade level schedule for the purpose of uniformity and are not meeting the needs and demands of the progressive teachers and the accelerated students.

The pressing demand for a study of the Grade Two situation resulted in the contribution of one of the committee members of an analysis of several methods of introducing the higher and more complex contractions below the present level of the sixth grade. The complete analysis is too detailed to be presented in this report, and will, therefore, be summarized. The

analysis presented the six following possible methods of introducing the contractions:

1. Complete contraction in all first books.
2. Two level plan.
3. Three level plan.
4. Distribution by word-grade level.
5. " " Braille sign grading.
6. " " the universal table.

For obvious reasons the advantages and disadvantages of the several plans cannot be discussed here. Each will probably have as many opponents and proponents as any other. Perhaps the system used, in itself, is less important if the desired results are accomplished. We might briefly remind the teachers that the usual arguments against the early introduction of contractions have always been relative to spelling and writing, and we are concerned in this report in dealing with the facility in reading.

In order that some actual teaching experience in this controversy be available to base a conclusive decision, the committee suggested that an experimental series of primers, first readers be embossed fully contracted. This recommendation is in line with two other reports presented at this meeting, relative to this problem. The first is an actual word study list to determine the frequency of occurrence of the contractions. The second report includes the announcement of the plan of one of the schools to pay for the cost of plates for a series of primary books to be embossed in full contractions, thus making some material available next year for the schools interested in this problem. The committee was consulted on the manner in which these books were to be embossed and suggested a method whereby most teachers may be satisfied. It will incorporate embossing the books page by page in both full spelling and full contractions to give the student a vocabulary for the contractions as well as to provide for the slow reader who may not be able to master the contractions during his first reading experience. Thus, accelerated and slow readers can be handled in the same class. The additional advantage of providing Grade Two contractions along with full spelling will be of obvious advantage to the teacher who does not know Grade Two Braille.

After two years of experimentation by schools volunteering to cooperate in this project, the committee feels that a more constructive report can be presented at the next convention, providing it is the wish of the Convention that this committee be continued and funds provided for soliciting and evaluating the results from the schools taking part.

The committee further recommends that the 1925 KEY TO BRAILLE MUSIC NOTATION be re-edited to incorporate the signs, dot-numbering, etc., adopted by the International Conference held in Paris in 1929, which signs, etc. are now explained in a Supplement to the Key—an arrangement most inconvenient and likely to lead to errors. In this connection it would be specifically understood that the re-editing and reprinting would in no wise affect or alter usages or definitions established by agreements duly reached. The committee also suggests that the American Printing House for the Blind be delegated by this Convention to publish a limited amount of Braille music for beginners stripped of signs for nuances and dynamics.

Your committee respectfully submits this report for the consideration of this convened assembly.

Paul J. Langan, Chairman
Marjorie Hooper
Janette Maris
J. J. Kerr
John Meldrum
P. C. Potts
L. W. Rodenberg

June 26, 1946

REPORT OF THE COMMITTEE ON THE LITERARY COURSE OF STUDY

NEAL F. QUIMBY
Superintendent, New Mexico School for the Blind

Your committee feels that at the present time there is a greater need for proper integration of school subjects than for changes in the courses offered, except in those cases where changes should be made to provide suitable courses for the many pupils who are not expected to attend college after graduation from the school for the blind. The committee recommends that those schools which have not yet expanded the curricula offerings to care for pupils other than the college preparatory group, should make a study of this problem.

Let us return to the problem of integration of subjects. Although we talk of a "core curriculum," although we prattle of "correlation," many teachers still insist on teaching individual subjects as though there were separate departments in the brain where each variety of knowledge might be properly stored and cataloged like books in a library. Why will we not realize that we must have correlation of subject matter and cooperation among the teachers of all subjects if we are to progress as we should and must? It is vital that we remember that we are teaching children and not subjects as such. We can have such a program if the staff understands the necessity for it and if the superintendents work with the faculties to make it effective. Following are several practices which will aid in making a cooperative program effective:

1. Determine the course objectives for each grade level, based on pupil interest, grade placement, and timeliness of subject matter.
2. Analyze the subject matter area for each grade level and provide clear and concise statements of the understandings which pupils are expected to develop.
3. Provide for pupil activities which will give the pupil the desired understandings.
4. Provide opportunity for the pupils to make application of the understandings which they develop.
5. Make provision for correlation in each course. This will result in an enrichment of all subjects.
6. Emphasize citizenship and character education at all levels and in all subjects.
7. Foster democratic living in all classes. Frequent teacher-pupil planning sessions should be held, and classroom procedures should be democratic.
8. Develop an understanding of the need for loyalty to the principles and ideals of the American way of life. We have been almost apologetic in our teachings of the values of democracy, while the exponents of communism and other ideologies have not hesitated to make use of the most rabid and emotional forms of propaganda to achieve their purposes.

Reading is, of course, one of the most vital problems in our schools. Many of the failures in school are due to the inability to read with reasonable facility. Admittedly reading Braille with the fingertips is not easy. However, there are certain factors basic to effective reading which must be considered. The mechanics of reading can be emphasized to the point where it interferes with the process of learning to read. Overemphasis on mechanics also slows the rate of reading and often results in lip reading, a serious handicap in establishing the ability of phrasing properly and sensing sentences. Too much emphasis on phonetics may hinder the synthesis of unfamiliar words. Permanent reading habits of the right kind will never be acquired by assigning long, unmotivated, uninteresting units.

Reading assignments must be interesting, specific, and well motivated. This is as true in the high school as in the grades. We cannot stop teaching reading, once the pupils leave the primary departments.

Children will not learn to read simply because we may say they must. They will read only when they are properly conditioned to read: they will read voluntarily only material which has meaning to them. It is the responsibility of teachers to build a proper reading foundation. High school teachers must accept the fact that various subjects require the use of reading skills unique to the subjects, and provide the instruction necessary to insure deep and meaningful understanding of the reading material related to the subject matter they teach.

At the 1944 convention of this organization, the Committee on the Literary Course of Study recommended that a number of books be embossed which have an elementary vocabulary suitable for pupils of low mental age, but with a story based on more mature social and emotional development. While this recommendation has not yet been carried out, your committee has made a list of books which are already in Braille and which have a relatively low vocabulary level with more advanced plots. The list is available for any who desire a copy.

The problems of social development with which the individual is confronted in his adolescent years are always a challenge to the school. Youth problems are, obviously, unusually disturbing during a war; however, the problems of the adjustment of the individual in the period of adolescence are the common experience of this age group, regardless of the state of affairs in the nation. To provide competent guidance and counsel to aid our youth in the choices of action which bear on their immediate problems as well as those which are related to their future activities is the responsibility of the school.

It is the place of the social science and the humanities to provide our pupils with the wisdom necessary to live with others in harmony. There is a real need in our curriculum for science and vocational training, but these needs are so well recognized I shall not dwell on them. The primary need is more and better general education in the social sciences. This field, more than any other, treats with the relationships of human beings with one another. Many of the difficulties which our graduates encounter and fail to solve satisfactorily are due to a lack of understanding of other people.

The various subjects in the social science field have major contributions to make. History throws light upon the wisdom of alternative courses of action, assists in forecasting the future, and contributes to an understanding of the development of individuals and groups. Sociology aids in understanding the ways in which groups organize to accomplish social ends. Psychology helps us to understand the inner man and the influence of environment on the individual. Geography deals with the relationship of man to his environment and the influence of environment on man. Economics throws light on matters relating to the economic welfare of human beings, while political science furnishes insight into the means by which groups organize themselves by means of various channels of government.

It is plain that none of the social sciences can be studied in isolation from the others. Sociology, social psychology, and political science deal with the organization of groups of human beings. Political science treats with group government as a specialized phase of sociology. Human geography is both sociology and geography, while economic geography is both economics and geography. All these and others are interrelated, due to the fact that all deal primarily with the hopes, activities, and the accomplishments of human beings. If we teach the social sciences as they should be taught, we can help our pupils make an adjustment to the seeing world which will be as valuable to them as the vocational training we give them.

The field of mathematics needs reorganization, if we are to teach the necessary tools and at the same time not be overwhelmed by irrelevant material. There should be a better application of

mathematics to specific subject matter fields. For example, teachers of homemaking should work with the teachers of mathematics to make sure that mathematical skills essential to the area of homemaking are taught. The homemaking course would seem to be the logical place to teach the mathematics of buying a home, of home bookkeeping, food purchasing, et cetera. Woodworking mathematics should normally be taught by the woodworking teacher. We must forget the idea of teaching mathematics as an inflexible body of knowledge independent of its purpose; of always segregating mathematics to a place and time divorced from its primary usefulness.

The rapid advances in the field of the physical sciences in recent years has rendered much of our science teaching, and many of our embossed books dealing with the sciences, incomplete, if not obsolete. However, it will be well for us to wait until these advancements have been organized and integrated before we try to inaugurate far reaching revisions. There is too much confusion for us to formulate a worth while program.

In conclusion: now is not the time to contemplate radical changes in the curricula offerings of our schools. The world, including the educational world, is too chaotic and too unsettled. It will be wise to wait until our feet are on solid ground, until the leaders of American education have studied the problems of post war education, and have made recommendations based on serious study and experimentation. Then will be the time for us to utilize their findings and adapt the findings to our own peculiar needs. Curriculum development is a slow process which should not be hurried. New techniques must be tried out, evaluated, and modified to keep pace with changing human and social needs.

A. A. I. B. TEACHER CERTIFICATION
July 1, 1944 — June 30, 1946

The following have been certified during the above period:

Ollie H. Hiner, Virginia School for the Blind

Mrs. Gladys F. Harris, Nebraska School for the Blind

June Rice Woodward, Alabama School for the Blind

Willard E. Weatherby, Overbrook School for the Blind

Reuben Miller Golladay, West Virginia School for the Blind

Ila Marie Parent, Louisiana School for the Blind

Nannie Elizabeth Poston, Louisiana School for the Blind

Edna Ida Baughman, Virginia School for the Blind

Mary D. Welch, Louisiana School for the Blind

Lillie Aamoth, Montana School for the Blind

Total number of Certifications 1940-1946 213

REPORT OF THE AMERICAN PRINTING HOUSE

A. C. ELLIS, Superintendent

During the war years the American Printing House for the Blind, in common with all service agencies, experienced great difficulties due to strict war-time controls of critical materials, a greatly reduced staff, and the impossibility of adding new equipment. This condition made it imperative that we limit our activities to the production of essential items. Twenty of our men entered the Armed Forces. Many employees accepted positions in war industries. Our staff dropped from approximately 140 employees to 90. In spite of this, the Printing House furnished the schools the pre-war dollar volume of books and appliances each year, made no increase in prices of Braille books and Talking Book records, and developed many labor-saving devices and techniques. In the first post-war year, we are replacing worn-out equipment, training new employees to replace those who have left us, and are planning for a greatly expanded production schedule in the fiscal year ahead of us.

The New Hall Braillewriter

We were just beginning the production of our Braillewriter when the war began. When the initial lot of writers were assembled, the department had to be closed due to shortage of men and metals. Important developmental work was done on the writer while the department was closed. Parts and tools were redesigned, constructive criticism analyzed and a few experimental writers actually built and subjected to rigid tests. We are now satisfied that our writer will meet the needs of the children in the schools and classes. Fortunately all of the servicemen in the tangible apparatus department have returned to their jobs. Many of these men received fine technical training and experience in their trades while in the service. One was a Master Sergeant in the Eighth Air Force and another was a Technical Sergeant who served in the European Theater and later in the Army of Occupation in Japan. Parts are being manufactured for two thousand Braillewriters and the assembly of the units will be started possibly as early as January 1, 1947.

A New Cubarithm Slate

Many requests have been received for a Braille cubarithm slate. However, no two people seem to agree on its design or size. The first model had to be discarded because it was thought to be too large. A new model is nearly completed but I fear that it too will be picked to pieces by the perfectionists who seem to derive more satisfaction out of finding one fault or weakness in a new device than in discovering a dozen virtues. I have about concluded that there will never be a perfect piece of tangible apparatus, or one that will please many teachers. The surest way I know to lose friends and make enemies is to build a Braillewriter or a slate. Our present goal is to produce an all-aluminum cubarithm slate with hard rubber or plastic cubes in order to minimize the noise of operation. It will have a drawer for the cubes and it should be light and attractive in appearance. If we succeed, we shall offer the slate to the schools and hope for the best. I have ordered an atom bomb about the size of an apple to use on the first teacher who sends one back and complains that it is 5/64" too wide, or the cubes are 3/10,000 of an inch too big.

Books in Large Print

At your meeting in Little Rock this Association voted unanimously to request the American Printing House for the Blind to print books in large print for the benefit of children with useful vision who are attending the schools and classes for the blind. I stated at the time that it would be impossible to establish a department for producing such books and materials during

the war. I pointed out that there were a number of serious legal questions to be settled before our Board could authorize the inclusion of sight-saving books and materials in our program of services. In spite of such a clear statement, three very wise superintendents, men who certainly knew better, wired me the following September, asking if we could furnish immediately all of the sight-saving materials needed for the establishment of the conservation of vision classes during the current school year. I often wonder how many delegates really hear what is said at these conventions.

I am very happy to announce that all serious legal questions have been answered in recent opinions by the General Counsel of the Federal Security Agency. In one opinion it is held that the Act of 1879: To Promote the Education of the Blind "includes large print books designed for the education of the blind." For administrative purposes we shall continue to use the following definition of blindness:

> Central visual acuity of 20/200 or less in the better eye with correcting glasses, or a peripheral field so contracted that the widest diameter of such field subtends an angular distance no greater than 20 degrees.

In October, 1945, questionnaires were sent out to the 53 residential schools for the blind requesting information concerning the number of pupils who could use sight-saving materials. Responses were received from 48 schools which represented a return of 90%. The 48 schools reported a total enrollment of **4,696** pupils as of November 1, 1945. Of this number it was found that there was a total of **1,271** children who could make use of sight-saving materials if they were available. This number represents approximately 27% of the total school population of the reporting institutions.

The superintendents were asked if they were in favor of developing a department at the Printing House for the production of books in large print. A few superintendents qualified their approval of the plan, but it is significant that there was not a single disapproval.

The problem of providing sight-saving materials is a subject of another full-length paper to be presented at this convention. I shall therefore conclude my remarks with the following statements: the Executive Committee of the American Printing House for the Blind has authorized the Superintendent to purchase equipment and make all necessary arrangements for publishing such sight-saving materials as may be approved by the Board of Trustees; and the press has been delivered.

Fellowship Students

In recent years numerous requests have been received from foreign countries for educational materials and for technical information and equipment needed to establish Braille presses in many countries. The production of embossed books and tangible apparatus requires a great deal of technical training and practical experience for the best results. Accordingly, we have always recommended, wherever possible, that young people should be sent to the Printing House to learn to operate embossing machines, printing presses, and bindery equipment. It is our hope that these trained people will return to their respective countries and furnish the necessary leadership and technical knowledge so necessary for initiating and developing Braille publishing houses. Too often brilliant young people have been transported to this country, educated amid the luxury of our great institutions and then returned to their own countries without the means for producing the educational materials which are essential to a sound educational program. We can imagine the sense of frustration and discouragement experienced by these students when they return empty-handed after becoming accustomed to the wealth of books and apparatus at hand in every school in this country. I am happy to report that two representatives of the Latin-American countries have received special training at the American Printing House for the Blind as a result of fellowships granted by the U. S. Office of

Education. I refer to Mr. Abraham Grimberg, Director of the School for the Blind in Santiago, Chile and Miss Delfina Otero, a staff member of the National Library of Peru. These highly educated leaders of the blind actually have learned the art of Braille printing by working in the various departments of the Printing House as apprentices. They have gained practical knowledge of the problems of embossing, printing, and binding books. We hope that future fellowships will be granted to representatives of other countries who wish to send young people to us for training. The only remaining problem is to find some agency which will underwrite the cost of the embossing machines and the printing presses which these people must have if they are to use the knowledge and skills they have obtained through great personal sacrifice.

Building and Extension

The most urgent need of the Printing House is for a modern, fireproof building to house its manufacturing departments. As a result of the generosity of our friends, our funds for building and extension are now sufficient to justify the preparation of building plans. If government restrictions on the use of building materials are relaxed, Trustees hope to contract for the construction of the building in 1947 so that it can be occupied on our 90th anniversary which is in February, 1948.

This year a new Talking Book studio has been completed; new high-speed Braille presses are under construction; and new and modern equipment has been added to the Talking Book record department. These and other improvements, together with the proposed new building, should enable the Printing House to meet any reasonable demands that are made upon it by schools, librarians, and blind individuals throughout the world.

Leadership in Book Evaluation

The statute which created the annual federal grant very properly provided that the selection of books furnished out of the annual appropriation be determined by the superintendents of the public institutions for the education of the blind. A Publications Committee, elected by the Board of Trustees, has been charged with the responsibility for receiving recommendations from the schools and for eliminating duplications before approval for publication is given. This procedure is well established and seems to meet all legal requirements. I am convinced, however, this does not go far enough. Superintendents, when they receive from the Publications Committee the annual request for recommendations of books to be published at the Printing House, usually ask their teachers to list the titles which they prefer. Now, book evaluation is a highly technical task and should be undertaken only by specialists. From the beginning the American Printing House has had no policy of its own with respect to book evaluation and selection. We have simply published what has been approved by the Publications Committee. In turn the Committee has largely approved what has been recommended to it. Probably the time has come for the Printing House to call upon experts in book evaluation to study our catalogs; find the weak spots; and give us complete information concerning the best books in the various fields. This information could be sent to all of the schools to serve as a guide to superintendents and teachers when making recommendations. Such a procedure would not in any way limit the authority of the Publications Committee or of the superintendents. It would, however, furnish an objective standard upon which to base the selection of texts and supplementary materials.

In closing, I want to thank the superintendents, librarians, and teachers for their unfailing patience with us during the war when we often could not obtain the materials and workers necessary for the prompt filling of orders.

WHEREIN LIES OUR PROBLEM

HOWARD STRICKLAND
Royer-Greaves School for the Blind, Paoli

Parents give their children names as means of identification and address. These names are used by sisters and brothers, parents and educators while speaking about and alluding to their brothers and sisters, children and pupils, and while recounting incidents of their behavior. Names are utilized, but attributes, attitudes and traits of behavior are attached to the names, and it is they which really delineate the personalities.

We educators are primarily and chiefly concerned with the personalities behind the names of our children. Many factors are at work every day developing and moulding their personalities. The so-called normal child has wide opportunity for social, intellectual and spiritual growth. But what about the handicapped child? The opportunities for his spiritual and total experiencial growth are limited and circumscribed, even his physical growth is hampered. We educators and workers know the unhappy consequences of these restrictive and retardative influences. Day in and day out we ask, "Why is Jack that way? Why does Joan do that?" and many other questions. Our immediate problem is the child, but really, wherein lies our problem?

John came to us last autumn. During the whole year he was involved in all manner of misconduct—obscene language in class, instigating reprehensible conduct among younger boys, lying, giving obviously inane answers in some classes and other blameworthy conduct. Corrective methods were attempted. His own group used their own punitive measures. He was ostracized by his club and by the Student Council. Reasoning and the sympathetic approach were used, but to no avail obviously, because he became involved recently in further misconduct. Undoubtedly, much of his behavior was motivated by the desire for attention. Furthermore, it is reasonable to assume that he shirked responsibility because he was never made to take it on at home. His twin brother, who is physically sound and active, and who has no mental deficiency, was told to wait on him and allowed to move freely in social situations. He was not encouraged to develop physical and social independence by his mother whose discipline was unintelligent in its conception and ineffectual in its application.

After dismissal from another school and a seven year lapse Norman came to us three years ago. His chief interest has been acquiring manual skill in leather work so that he could attempt to achieve economic independence after leaving school. He has stubbornly resisted all efforts to guide him toward the recognition of the importance of total education. It is felt that this obstinacy is encouraged by his family who fulfill his every demand, and who do not discourage his self-satisfied and smug attitude. He has resisted all corrective methods. For his refractory resistance we have tried ridicule. His club suspended him. Patient and understanding guidance were attempted. Seemingly, all of our efforts have been futile. We encourage his interest in shop work, but we feel that an essential part of his adjustment is learning to cooperate, and when he shows a sincere readiness to do so, he will find us working more fully with him.

We believe that in these two cases our contention that the parents and families of these boys have been retardative and unwholesome factors in the development and growth of their whole behavior pattern. Parents are often ignorant of the methods of training and educating handicapped children. Many of them will not seek professional advice and guidance until habit patterns are pretty firmly fixed and difficult to modify and replace. By correspondence, by visits to homes and by articles in the school magazine we have tried

to point up to the parents and families the attitudes and comportment necessary if they really want to help their children toward a satisfactory adjustment, and by these methods we have tried to build an understanding and cooperative relationship between them and us. Furthermore, we have sent report forms filled out with impressions and judgments of their children's work with respect to Character Growth, Social Conduct, Arts, Sciences, Social Studies, Music, and Manual Arts. In addition these forms have space for supplementary remarks.

Psychologists are so often helpful by their assistance in opening up an avenue of understanding to a personality. Yet in some cases they seem to be unsympathetic in their attitudes or arbitrary in their prognoses. For example, in the case of Charles who came to us six years ago from a nursery school for the blind. While there, he manifested signs of educability, but the year previous to his dismissal he slipped. On three successive psychological tests he made scores of 49, 44 and 39. These scores placed him on the imbecile level, of course, but other data suggest that a thorough investigation into the causative factors of the slip back and these low scores was not undertaken. Since Charles has been with us he has made remarkable strides as can be attested to by recent scores of 95 and 92 on psychological tests given by psychologists in University of Pennsylvania and Temple University. In another instance two leading psychologists of New York City told Patty's parents that she would never articulate more than gibberish and that they should place her in an institution for feeble-minded. She is retarded (at age five she is about at two-year mental and physical level), but she is steadily making progress. She speaks in sentences, moves everywhere about the house and campus freely and shows other obvious signs of development and growth.

It seems to us that in these two cases the psychologists were unreasonably arbitrary in their prognoses. We need the psychologist. We respect his professional ability and status, but might he not say: "From my data I believe thus and so. With special training maybe"? Such a psychologist was the head of one of our state institutions who gave Marvin, the son of a Pennsylvania Dutch family, a psychological test in his own language. He scored low normal, whereas in one of our schools for the blind he had attained a much lower score; therefore, after some attempt had been made to educate him he was dismissed. The psychologist in this case suggested a school equipped to provide special education and training. The same psychologist insisted that Charles G. should not be kept in his institution because it was for the insane, and Charles was not insane. Again, he urged specialized education and training.

Another factor in personality development and growth is the attitude of the public toward the handicapped child. Because people do not understand through lack of experience and through ignorance of the facts, they have erroneous ideas and peculiar impressions. They think it remarkable because a blind person can play the piano or operate a typewriter, or because a blind person enjoys hiking and can dance. Often they stigmatize and pity the blind. In many cases the blind themselves are responsible for the erroneous ideas and distasteful attitudes.

We strive to provide our children with all of the tools possible for them to demonstrate to the public that they have not adjudged accurately and intelligently. Membership in organizations and household responsibilities provide experiences which should be helpful. Academic classes, musical instruction and manual arts courses are in our educational programs. Guidance with respect to the importance of personal cleanliness and neatness in body and in habit is given, and also, with respect to ways by which to gain social and physical poise. We do all that we can to round out our children and to equip them so that they can demonstrate their fitness for status and prerogative for a chance in society. If we educate our children, we shall educate the public.

Often during our explorations into personalities we uncover the child who is not

only handicapped mentally and visually, but also handicapped by parental unaffection and severance of relationship. Pat is such a child. He has spent most of his life in school. His mother and family have written to him sporadically and have had him home for four weeks in ten years. After that four-week visit his mother asserted that he masturbated flagrantly—an obvious mechanism to get rid of him. We say obvious because he has never been seen to practice this habit, and he is about the house and campus a great deal. He has a beautiful bass voice, which has been cultivated for a year, and he has acquired a degree of manual skill in the shop (his work is slow, but accurate). He taught himself to shave and his appearance is always immaculate. What is his future? Workers in his home state believe that he will have to go to an institution for the feeble-minded. Where else can he go? Wherein lies our problem in this case?

Children's names are used as means of identification and address. We use these names for these purposes, but we are primarily concerned with the personalities behind those names. As we work with our children, their names become less important and their personalities take on larger significance and deeper meaning. Parents and families are so often responsible for their children's retarded development and growth because they are ignorant of the methods necessary in their handling, and because they often seek professional guidance too late. Psychologists are of invaluable assistance in helping parents and us educators, but in some cases they seemingly fail to investigate thoroughly and are too arbitrary in their prognoses. By educating our children we can hope to educate the public. In the case of parental and familial unaffection and disownership we must find a solution for children in this situation. We are the educators and workers. We must accept the challenge. Wherein lies our problem?

EDUCATION FOR SOCIAL LIVING

OSCAR E. L. NEWMAN
New Mexico School for the Blind

Mr. Chairman, and Friends:

In the presentation of this paper an effort has been made to be relatively concrete, presenting not only a bit of the abundant philosophy on socialization, but also some of our experiences, which it is hoped may be helpful to you. While we are primarily interested in the problem as it appears in our schools, we must take note of the fact that socialization is an ever increasing problem in the whole field of education. I should like to pass on to you a part of the introduction of an article I recently read: "For the common man democracy is a quality of the life which he lives in his immediate locality. Life there makes sense to him because it is the life about which he has primary knowledge. It would be stupid to ignore the larger communities, i.e., the province, nation, and world of which the immediate neighbor is not. . . . The world beyond and without is a long chain and the only link he really knows is his home town. The school is a strategic force in the home community and the teacher in turn is a key agent in the school. The job of the school, therefore, in part, is that of helping to create a community in which young people have a chance to grow into strong and effective personalities and in part the job of the teacher is that of a manager of those community relations which come with his jurisdiction."[1]

The blind person must, of necessity, come into adjustment to the world, for the world cannot be adjusted to the individual blind, whatever may be his real talents and desires. Schools are a part of the environment which they serve; they are not autonomous or insulated against the social forces and influences around them; and we

who control the destinies of blind children have a moral obligation which we cannot shirk.

In many ways education for the blind has, since its beginning, been sterile of action. It has scarcely touched real life or life's problems. In the few instances where schooling has come down to the level of practical problems, it has never sought to carry through into planned intelligent action. The concern in recent years for the development of socially desirable attitudes in pupils has resulted only in efforts to change the beliefs of our pupils. I hate to admit that little or no effort has been made to provide pupils with actual practice in the application of these beliefs to life situations.

The hope that the socialization of blind children can come painlessly through the mastery of content alone must be discarded as unrealistic and impractical. The idea must be discarded of parcelling out responsibility for developing in pupils the several components of social living. No one teacher or department concerned for the dignity and worth of individuals, can teach the skills of effective democratic participation, unless those qualities are present everywhere in the school, in class and out.

We do not claim to have reached the acme of success along these lines in New Mexico, however, we feel that we have made definite progress and that some phases of our program may be of value to others who are struggling with the same problem.

The job is not simple. "So far we have little knowledge that is useful to the teacher. . . . The nearest approach comes from cultural anthropology, but the anthropologist knows more about primitive communities than he does about the communities in which we live, and his studies of our own communities are often lacking in the insight most essential to the teacher."[2]

In residential schools the problem is further complicated by the various communities on which we draw. We have endeavored to gain as much information as possible with reference to each of our pupils by setting up case studies of each individual with reference to his community, family, health, intelligence, and opportunities. These studies are available to all staff members and they are all encouraged to make full use of them.

Let me present to you briefly a picture of New Mexico. We have a population of nearly a half million, spread over an area of one hundred twenty-two thousand square miles. Thus the fourth largest state has a population less than that of many cities in our country. The first to come arrived by way of the Rio Grande from Spain through old Mexico and made their way into isolated valleys, where their descendants live today and speak the language of sixteenth-century Spain. Just ahead and with the coming of railroads in the eighties and nineties of the last century came the Anglos—a term applied locally to those of the white race who are not of Spanish ancestry. The first were easy-going; the new-comers were aggressive and energetic. Much misunderstanding existed between the two people, and many clashes occurred, some quite violent; but much understanding has developed through the years.

The communities on which we draw are as varied as our population, some coming from ranches or small towns thirty to forty miles from railroads or principal highways; others from some of our larger cities. Our problem, then, is to harmonize these differences, together with other problems incident to blindness, and send them out into the world with a spirit of service and a desire of leading as nearly as possible the life of the normal sighted person. To accomplish this we have had to seize on every opportunity offered, no matter how small it might be.

This brings us to the school community and the opportunities offered there. Our school is located in a town of approximately four thousand. (Some argument was met with at this point. It has been claimed that during the time the Alamogordo Air Base has been in operation that the population has risen to eighteen thousand, nevertheless, the color of the community is still that of one of four thousand

people.) There are not a dozen towns or cities of larger size in the state; so in this respect our school is well located as a place of preparation for our pupils. We are limited in the amount of commercial entertainment, that type of entertainment which is not conducive to a full social development. I think this an advantage in meeting the problem.

Since we are limited in entertainment and cultural connections, we invite in all that might be of some help to us. We encourage our guests to talk to and meet with our pupils. On many of these occasions teas have been served, sponsored by members of **The Socialettes**, a club organized by our girls for self improvement in social ways. The girls arranged for and prepared and served with a minimum of supervision. This activity was not confined to the school. With a need for all available assistance in entertaining troops stationed at the Air Base, some of our girls acted as hostesses in serving teas at the U.S.O., rendering much valuable service and gaining much in the way of poise.

Another part of our program has been the presentation of concerts, plays, and other entertainment. To these the public has been invited and has shown a hearty appreciation of the high quality of work we endeavored to present. As a result these programs have been presented in whole or in part away from the school. During the past year the Boys' Glee Club, as guests of the Lions' Club of Roswell and Artesia, journeyed to these two cities and presented programs. These two communities are some distance from the school and gave to the boys confidence in travel.

Athletics have offered an excellent opportunity for breaking down isolation. To hold meets with other schools is difficult, as even our public high schools must often travel fifty to a hundred miles to compete in athletic activities. However, during the past year our wrestling team held meets with the New Mexico Military Institute at Roswell and the Arizona School for the Blind at Tucson. In addition to winning both matches the boys won many friends and much confidence in themselves. At the Arizona School we were lavishly entertained, largely by pupils of that school under able direction of the staff of that school. On the return trip from Arizona the boys ate dinner in the dining car, a new experience to most of them. This was just another part of the larger community, which to you may seem simple; but to our boys was something to be worked out before they could feel free.

In our student activities we have endeavored to have them take as large a part as possible, planning, preparing, and conducting parties. Our athletic association, organized three years ago, has taken over much of the work and worry heretofore assigned to the staff members. Much improvement in management and feeling has resulted. We permit our boys and girls to be together at parties and dances and to work together in planning and preparing for them, thus developing a mutual respect for each other and for each other's abilities and other good qualities. The association also sponsored a bowling tournament, which was the source of much enthusiasm on the part of teams and individual players, who spent many hours in practice. Likewise our track meets and wrestling meets have been sponsored by the association, which handled many of the details.

So far I have talked largely of presentation of activities by the school and at the school. If our pupils are to go into outside communities as individuals and mix with other communities, they should have opportunity to do this while in school. We have not attempted to isolate ourselves or always present programs in full. Our chorus, glee club, and individuals are encouraged to be on programs with other groups. During the last two years in school two of our girls sang regularly with a local church choir; one of our boys sang in a male quartette this year; and one of our boys, while at home during the summer, joined a local musical organization, and his work was so well appreciated that he was invited to come home and help them during the Christmas season at their expense. This is a fine tribute to an individual's initiative in the community.

In other ways our children participate

in community activities. We invite the children of the community to our parties and in turn have been invited out. We have had to make adjustments. One of these I would like to pass on. Bingo being popular at most parties, we found it necessary to devise usable Bingo boards. We took ordinary Bingo cards and Brailled them. These we attached to thin boards and drilled holes under the numbers. We made metal pegs from some old piano balance rail pins. These boards were usable to sighted and sightless alike. With a little practice at home our children were able to keep up with others and more isolation was broken down. This was also a lesson in resourcefulness to the pupils.

Our Boy Scout and Cub Scout troops are directed by outsiders. The boys welcome these acquaintances. I am firmly of the opinion that we should have men not on the staff to direct these activities, giving them an opportunity to meet with the boys. We know that in the world at large, boys have their scouting activities directed by capable and earnest men, and so it should be with us. A bit of good advice from the outside can help much in the way of right living.

Our religious education is not confined to the school. Our children go to Sunday school and church in the local churches. Our Catholic children attend instruction in town. Once a week our local priest comes out to give instructions. So here again the children make acquaintances with those of the community.

Before passing on to another phase I would like to mention two more instances of community cooperation. We have presented programs at assemblies of Alamogordo High School and in turn they have presented programs for us. This year when we planned our rally for our wrestling team just before leaving for Arizona we felt the need of a good band. A request to the director of the Alamogordo High School Band brought them out in full force, uniforms and all. I think that all thoroughly enjoyed the evening.

But is the school socialization program for pupils only? People who have to live together and who will not interest themselves in outside activities can certainly get to hate each other. Much of the boresomeness of constant association can be relieved by outside contacts. In an article by W. Harold Bleakley, "The Functions of the School for the Blind in the Process of Rehabilitation," we have been quite rightly taken to task for the manner in which we permit blind children to absorb undesirable traits. We must get out and associate as staff members if we are to remain aware of these undesirable traits. There is a place for teachers in time of leisure as well as in school. Our staff members have identified themselves with local organizations, church, service clubs, and fraternal organizations, not merely as members, but in leading parts and above average in participation. In this active participation we have received ideas to pass on. Also through these connections we have been given opportunities to make known our work and gain much cooperation. We try to make allowances in our schedules for community participation on the part of all.

This brings up another problem, which has been of much concern to administrators in the last five years. The obtaining of competent teachers for our schools has been and is still a headache. The bringing in of teachers accustomed to the methods of sighted children means a period of adjustment for both learner and teacher. We must and should have them, so as to have a connection with the normal world of the sighted; they should be of the highest quality and understanding; but we should take note of the fact that we are preparing blind children to make their way in the world and a number of them can and should find employment in our schools. They should have had the type of training that will make them an asset to the school. The poor social and emotional adjustments of many teachers with impaired vision is a reflection on our schools. Not much can be done about the past, but we can be watchful of the future.

Before concluding there are a few items that I should mention and which have been treated rather fully at times. We must not neglect to inspire the individual with a

desire of acquiring personal habits of the highest quality: appearance, health, attitude of mind, eating, etc. Several good treatments on all these have been written. A good health program and a program in corrective work in physical education is an essential foundation. A good body is conducive to right ways of thinking and to acceptance of the best thoughts.

In conclusion, we must realize that the blind individual is to live in a world of the seeing; he must make his adjustments for the world cannot adjust to him; this adjustment is the concern of the whole school and should be made not only in the school but as nearly as possible in the world in which he must live; and the school must seize on every opportunity to help him do this normally. In making the blind individual socially desirable we do one of our greatest services. This we cannot do if we ourselves lose step with the world. Though I have presented at length specific instances, this was done in the hope that our experiences might be of help to you in meeting the problems confronting you.

---

1 "The Teacher is a Community Engineer," by Howard T. McClusky, as condensed in **Teachers' Digest**, April, 1946, p. 88.

2 Ibid., p. 88.

REPORT OF THE AMERICAN FOUNDATION FOR THE BLIND

DR. ROBERT B. IRWIN, Executive Director

The work of the American Foundation for the Blind during the past year may be summarized as follows:

Blinded Veterans—Our service to the blinded veterans is designed to supplement the work of the Army, the Navy, and the Veterans Administration. Contact was established as soon as possible with each man who lost his sight in the service of his country during World War II. Twelve hundred and seven of these men have been provided by the Foundation with the usual special watch used by the blind; six men who have lost both their hands and their sight have been supplied with repeater watches which enable them to hear by means of a stroke of a tiny bell the exact time of day; 564 portable typewriters and reconditioned Braillewriters have been given to the men or sold to them at less than half the cost. The beginning of the year 1946 found our services to blinded veterans in a transition stage with the emphasis on the discharged blind veteran becoming increasingly prominent. By this time there were more blinded men discharged to their respective communities than remained in the hospitals.

In all this work the Foundation has had the courteous and helpful cooperation of the Army, the Navy, and the Veterans Administration, staff members of the Foundation visited most of the blinded service men in the hospitals. These visits have made it possible for us to have friendly contact with the men, contacts which have been continued through correspondence after the men have been discharged.

A special request from the Veterans Administration for assistance early in the year offered the Foundation an exceptional opportunity to play an integral part in the work with our blinded veterans after their discharge from service. This resulted in the Foundation's conducting a series of four training courses of three weeks each for the Veterans Administration personnel throughout the United States and the insular possessions. The men and women —127 in all—who attended these courses were Training Officers and Vocational Advisors specifically assigned to work with the blinded veterans in their respective states. The object of these courses was to give the members of the staff of the Veterans Administration some familiarity with work for the blind and a knowledge of the resources available to the blinded veterans

as they take their places as blind members of their communities.

At the request of General Bradley, the Executive Director of the Foundation is serving as Chairman of his Advisory Committee on the Blinded Veteran. This has given an unusual opportunity for the Foundation to establish a close working relationship with the Veterans Administration, an affiliation which it is believed will work greatly to the benefit of the blinded veteran.

Educational Services—During the past year four summer school courses have been offered for teachers and social workers with the blind. A training course for social workers with the blind was conducted by the Foundation under the auspices of the University of Michigan in cooperation with the Michigan State Normal College. This was attended by 32 students from 13 states and the Dominion of Canada. Other summer school courses for teachers of the blind were conducted by members of the Foundation staff at the University of Wisconsin and the University of Washington. A fourth course was given at Hampton Institute in Virginia for colored teachers of colored blind children. A member of our staff also conducted throughout the year a course at Teachers College for students wishing to enter work for the blind.

Field Work—Consultation service has been rendered on the ground by members of our staff in Arkansas, Florida, Illinois, Indiana, Kentucky, Mississippi, New Hampshire, Ohio, Rhode Island, and Tennessee.

Work With the Deaf-Blind—During the past year the Foundation opened a new department for the deaf-blind under the guidance of an Advisory Committee known as the "Helen Keller Committee on the Deaf-Blind." This department is making a study of the condition of the deaf-blind population of the United States with a view to inaugurating a service designed to improve their situation. The number of deaf-blind persons in this country is unknown. The Foundation has on its register over 1,500 names. The largest group ranges in age from 20-50 years, the next group from 50-90 years, and the third group from 1-20 years. It is hoped to extend this register and to contact so far as possible every deaf-blind person listed, either through personal visits or through the cooperation of local agencies for the blind. In starting a service to this group of isolated people, the Foundation is counting hopefully upon the cooperation of agencies for the blind and the deaf in every State in the Union.

Research—Research work has been undertaken to develop special appliances for the blind and special machinery for increasing the vocational opportunities of the blind. Among these are an improved Talking Book machine, improved records, and audible scales. We hope to complete development work soon on an electric spinning wheel and a special loom which will, we believe, provide remunerative employment for many blind workmen.

Legislation—It is the policy of the Foundation to watch very closely legislation which may affect the welfare of blind people. The Ways and Means Committee of the House of Representatives of Congress has during the past year been studying the Social Security Act with a view to improving and broadening its benefits. Any modification of this Act may affect seriously either for good or ill the blind people of the United States. For this reason the Executive Director of the Foundation has devoted considerable attention to this subject and has seen to it that the interests of the blind have not been overlooked by our lawmakers. It is impossible to predict at this time what action Congress may take in this connection.

The Foundation is also interested in a bill now pending in Congress which would authorize an increase in the appropriation for books for the adult blind from $500,000 to $1,125,000. If this bill passes, funds for Braille books would be increased from $100,000 to $200,000, and funds would be made available for replacing the 20,000 or more government-owned Talking Book machines made on a W.P.A. project supervised by the Foundation. These machines are fast becoming worn out after service over a period of from eight to eleven years.

Scholarships—The Foundation has continued its policy of granting scholarships to promising young blind students wishing to take higher educational work. During the current year it is extending scholarship assistance to three students from Brazil who are studying in the United States preparatory to entering upon work for the blind in their own country. Positions have already been promised these young people as soon as they complete their work here.

Rest-Haven—About three years ago the Foundation was presented with an ample residence and beautiful grounds known as "Rest-Haven" in Monroe, New York, to be used for a vacation home for blind women. Last summer we received at this home for vacations of three weeks 128 blind guests from New York, New Jersey, Pennsylvania, and Connecticut. This provides almost the only opportunity for most of these women to get a little respite from their drab home surroundings. The vacations there are free of all expense to our guests.

The Foundation is looking forward to considerable expansion in its work during the coming year, an expansion which has been impossible in the past because of lack of personnel and office accommodations.

THE KINDERGARTEN

FRANCES F. TREDICK
Wheelock College

The importance of kindergarten education does not have to be emphasized here at Perkins for the kindergarten has for many years been a vital part in its plans for the best development of the children in its care. To begin group education with young children is essential to successful group adjustments and the developing of better standards of living together. Since the kindergarten made its place and has become an accepted part of the school curriculum, the nursery school has also become an important factor in meeting the needs of young children. Here again the Nursery for Blind Babies, in Boston, shows recognition of this need in regard to eye handicapped children. So we find that both some normal as well as handicapped children have had the benefit of nursery experience which should be of great value to them in adjusting to the kindergarten activities.

However for most children kindergarten is the first break with the home in which children find themselves with a group of their own age. Here they must have time to adjust to satisfactory and successful living and working with their fellows.

The kindergarten is a new world to the children and should be carefully planned to meet their physical, social, emotional and intellectual needs, in an environment built to be attractive, comfortable and well furnished with materials and equipment to stimulate good thinking and happy occupation. The room or rooms should be sunny, well ventilated, of good size to give opportunity for active work and play.

Furnishings must be of suitable child's size—how many times we have seen children come into a kindergarten and immediately feel at home because the things are built for their comfort and there are also in the room things with which they are familiar, as well as new things which are challenging to the active, the curious or the shy children.

To be at home in school is one of the aims of kindergarten planning. A quiet homelike atmosphere gained through the careful, convenient arrangement of the rooms helps to make the children feel at ease. Children who are at ease will be ready to contribute in many ways because they feel real satisfaction in what they are doing and will gain real skills through accomplishment of the many and varying experiences offered in the environment. Through the kindergarten year there must be a variety of experiences, rich in their

appeal and interest on the children's level of understanding. There must be materials for interpreting the life they know around them and materials with which to create and interpret their experiences and develop new ideas.

The equipment in the kindergarten must be carefully planned and suitably placed for the greatest value to the group. Large equipment for big muscle development such as jungle gym, slide, see-saw, etc., may be both in the room (if space allows) and out of doors. Bicycles, wheelbarrows, carts and hoops are excellent. Toys of many kinds. Blocks are essential—of good size and good variety, a well furnished doll corner, housekeeping toys, paints, crayons, clay, beads and peg boards and puzzles are some of the materials that add interest and are a challenge to creating.

Many of the children's interests will suggest supplementary materials which are easily available—orange crates, pasteboard boxes, spools, odd boards, etc.

Science materials come into the room as the days go by, from the flowers, fruits and seeds in the fall, pets and plants and the winter interests of cold, snow and ice, then the spring awakening of seeds, tadpoles, birds and many other normal experiences which may be made very real and stimulating for the group.

The library corner has its picture books and simple stories, well illustrated, familiar illustrated poems as well as an ever increasing list of books, as the children's interests and ability to understand develops. This corner should have tables or book shelves and comfortable chairs. Rocking chairs invite browsing with the books. Science books, well illustrated, are available now and should be added as the interests develop. The kindergarten children are not expected to read the books but will thoroughly enjoy them and ask to have them read for more thorough pleasure and understanding.

A work bench adds much interest in some groups; this must be well supervised and suitably placed, not to be disturbing to the group and also should have well made tools, with wood suitable for the children to achieve success in making the simple and satisfying articles that they attempt. Playground space also should be near the rooms and well equipped for physical development and pleasurable group play. Shade trees under which classes may work are very desirable and space for the children to have gardens to work in is a real addition.

At the first of the year the children are more interested in working alone than with their friends but as their interests develop and they wish for help with some project, they ask others to join them. They turn naturally to the teacher who is always alert and ready to help all along the way, but the day comes when another child can help and willingly does so. Here we see the beginnings of cooperation which will develop into group interests very rapidly and successful group planning is started.

Talking things over together, sharing ideas, experiences and accomplishments makes for harmonious living and increasing satisfaction in both individual and group achievements.

"Growing intellectual curiosity about a wide range of subjects and greater understanding of the world about them" are usually apparent in the children's responses as they progress through the kindergarten year. Basing the work and play of children on their interests is essential to a successful kindergarten program.

The kindergarten day is planned to meet the many needs of the children. It starts usually with a free choice of activities and the use of materials to further these activities, for an hour or less depending on the age and ability of the children.

Then the clearing up time which means that all work together helping those who have more to put away than others, seeing that the room is in order before we talk over what has been done. To encourage conversation and further interest in what has been going on or to talk of things that are of interest to all, will follow as we are grouped together for this give and take of experiences and ideas. Then too, this may be the time for simple songs to be sung with the choices by the children

or new songs introduced by the teacher as well as listening to music and getting the feeling of it and expressing this feeling through rhythmic activity.

A well balanced program includes time for toilet, luncheon, and rest. These should be chosen with the general program of the children in mind—when did they have breakfast—when will they have luncheon at home? Plan for the best time in relation to these and make the rest of the day's activities fit in with this period which should be at the same time each day. Plans for the toilet and wash up period before luncheon depend on the ability of the children to care for themselves and also whether the wash rooms are easily available to the kindergarten room.

The lunch which follows is simple, usually a cracker with milk, fruit juice or soup as the individual school may provide. The customary courtesies of table manners, with a "thank you" verse before eating and quiet conversation make this a happy and very worth while daily experience.

The rest period should be carefully planned for a quiet orderly rest is a wise provision in most kindergartens. Cots, blankets, rugs or papers are used to give comfort or protection. Early in the year a short time is usually sufficient as the routine must be established—but the time will soon be lengthened to meet the group and individual needs.

There are many plans which fit into the period following the rest—story time, quiet games, music, free play or work. Play out of doors is a good plan, for at some time during the morning, there should be out of doors activity.

There are many things that develop in a kindergarten day in activities both as planned by the teacher and those initiated by the children which are worth while—that the program must be a flexible one. However this must not mean a casual hit or miss planning by the teacher—she must have very definite goals in mind that she knows should be reached and very definite plans for developing right habits and attitudes in the individual children and in the group.

So in a day built around the interests, desires and careful planning to meet the developmental needs of the children draws to a close. Has it made its contribution to rich living for the children? Has it brought about finer relationships, better habits, developed skills that will be worth while in a demanding world? Has it brought happiness and satisfaction to each child? Has it given the teacher a feeling of work well planned and a good starting point for her to meet the demands of the next day? These and many other questions will face the teacher.

There are many learnings which the children acquire during the kindergarten year. There are familiar expressions which to my mind are often overemphasized. One is "preparing the children for the first grade." That is the next step in the educational ladder, but our business in the kindergarten is to make the children's lives on this age level as well ordered and full of rich experiences as possible and that as they may move into the next grade they have what is needed to bring success there.

The other phase is "Reading Readiness." The kindergarten year should make the children alert and ready to adjust to many kinds of learnings which contribute to reading, writing and arithmetic, but most important of all to learn how to live harmoniously together.

Building a background of knowledge and experience will serve as an incentive and challenge to better understanding when the time comes for more formal application of these skills is necessary.

The teacher who is ever growing through her constant study of children and their needs will know when it is right to introduce formal steps in reading and the other skills.

In a pamphlet published by the Association for Childhood Education, "Toward Democratic Living in School," the objectives of education are listed as:

Objectives of self realization
" " civic responsibility
" " economic efficiency
" " human relationships

In thinking over the aims of the kindergarten I have tried to analyze them under these headings to see if the kindergarten can claim successful plans for developing the basic important habits and attitudes to build good citizens.

Objectives of self realization:

Are we helping children to develop
- in self control?
- in learning skills that will be meaningful to them and aid them to further learning?
- a respect for others—their ideas and opinions?
- a love and appreciation of all things beautiful?
- to recognize their own abilities—are we helping them learn to analyze, criticize, explore and experiment?
- to work and study to get the right answers?
- to observe and ask WHY?
- to use their eyes and ears and other senses to widen their understanding and enjoy more and more in this interesting and challenging world?

Learning the objectives of civic responsibility:

How do they learn?
- By obeying rules.
- Taking care of equipment—each of his own and that of others.
- Having and taking responsibility for common property.
- By taking care of plants and pets.
- Taking turns.
- Sharing own possessions with others.
- Sharing ideas and skills.
- Giving others opportunity to express opinions.

Learning economic efficiency:

What are some of these learnings for young children?
- Pride in doing well.
- Appreciation of community workers and their contribution to the common good.
- Community advantages—school, library, health protectives.
- Value of money and how to spend it intelligently.
- Accept responsibility for performing certain assigned tasks within their ability and on their age level.

Objectives of human relationships:

- Learning to appreciate others.
- Teachers and children planning together.
- Share work and learn that others have rights too.
- Making friends.
- Being tolerant.
- Fair play in all things.

To be of real value there must be in all these a satisfaction and a desire from within to do them and do them well. The best learning in a democracy takes place in real situations with real people working and playing together. To achieve these objectives we must see the total environment.

Yes, I think that the kindergarten does meet the requirements set forth in these objectives—but we must remember that it is the teacher who must translate them for the children on their level of understanding. The teacher is the keystone in the teaching situation whether she be in kindergarten or any other grade. She must be a person well trained, keenly interested with a deep love of young children. She must be a growing person who does not consider her degree as the end of her education. She must be an eager, live person who keeps abreast of the times in the educational field as well as in the world about her.

Her interests must cover those of her children and go away ahead of them that she may have information at hand to use for the many demands on her stock of knowledge and she must have ingenuity and patience beyond that of most people to hold herself ready to meet the many unusual and demanding situations that arise.

THE LIFE OF A KINDERGARTEN CHILD IN THE CLASSROOM

MARCELLA J. ALBRECHT
Kindergarten Teacher, Iowa School for the Blind

The kindergarten session at the Iowa School for the Blind begins at 8:20. Jimmy lines up outside the classroom door with the seven other children in his class. When the door is opened, he eagerly hurries over to his chair at the work table to be the first to tell his "news" to the class. Today he has a pair of Scotties with magnets affixed underneath, which his matron has given him. The class gathers up a box of small articles to be picked up and makes a list of those which the magnet will attract, learning that only those made of iron can be picked up. After the possibilities of the new toy have been explored, Jimmy puts it up on the cupboard, and the class repeats the "rules" of the Good Kindergarten Club: "I keep my fingers out of my eyes, ears, nose and mouth. I rest my whole body during rest period," and the teacher pins his club pin on each child. Then everybody gets busy at his morning "duty."

This week Jimmy is housekeeper, which means that he must put the play house in order for the day, getting the two dolls out of the bed which the class made and painted earlier in the year and changing their pajamas for dresses (which involves manipulating buttons and safety pins). Jimmy could make his own dormitory bed when he came to school but some of the children learn much about the fundamentals of bed making from this small scale model which they can easily span with their hands. Meanwhile, Ruth is watering the plants, Dickie is feeding the goldfish, Pat is putting the chairs in a semicircle around the piano for rhythm band, while Jean puts the instruments on them, Marie is washing the linoleum top of the work table, while the story hour mats are being put into order by John. Phyllis, whose behavior reactions are unstable, is occasionally responding to the efforts of the teacher to interest her in rocking her dolly to sleep by singing a lullaby.

When the signal chord sounds on the piano, Jimmy puts down his book and finds his chair for rhythm band. The practice is short this morning because so much time has been taken up with the magnet. While Jean gathers the instruments and puts them away, Ruth, Jimmy and Dickie are birds, flying and then hopping in rhythm with the music. After everyone has had a turn, they gather in a circle for discussion of the bird unit on which they are working. Today they have a new stuffed bird to examine, which the teacher tells them is a blue jay. Jimmy can easily distinguish it from the canary and robin with which the class is already familiar. Dickie, however, confuses it with the robin. The teacher tells them something about the blue jay. Marie thinks she can say the poem about a robin which the class studied yesterday. By the time all the class has tried, it is time for dismissal for chapel.

After chapel, Ruth passes the oilcloth mats for lunch. Dickie passes the glasses of milk and John the paper plate of graham crackers. While the class is eating, Pat suggests that for the morning walk they go to see if the garden is coming up yet. On the way back to the classroom they discover that the buds on the plum tree are beginning to open. Jean wants to see the bridal wreath bushes, but, since it is time for the "Children's Corner" radio program, Jimmy and Ruth are delegated to hurry ahead of the others to put down the rugs for rest. While wraps are being hung up, the teacher tunes in the radio program. (On rainy days when the class cannot go out-of-doors, the rest period immediately follows the lunch period, sometimes with soft music on the phonograph, but usually in silence.)

When the program is signed off the air, the rugs and blankets are all folded—most of them independently and very neatly

now—and put into the rug box. The work period which follows is spent by three of the children in working on frames or a wooden shoe for lacing or tying. John, who is a new pupil is learning to button. The children who have mastered the frames and can manage their own shoes are making nests, eggs and birds of plasticine or coloring birds to put on the bulletin board. Ruth announces that she has made three nests and Jimmy counts up to see how many eggs she must make if she puts three in each. Before dismissal for dinner, all work is put away. No one did any cutting today so it is not necessary to pick up scraps or sweep the floor.

The children come back to the classroom after their naps at 1:40. The calendars are taken down from their nail and a class decision is made as to the kind of weather outside. Today is sunny and windy so after Jean passes her yellow "sunshine dots" and everyone has one pasted on the square for today, Jimmy passes his "windy dots" which are smaller and are to be pasted on top of the others. Some of the children never need to be helped to find "today" and all of them are acquiring a fair idea of what is meant by a month and a week. The calendars take about fifteen minutes and then everyone gets his wraps to go out-of-doors for physical exercise. (On days when the weather does not permit this, the class enjoys singing games and dramatizations.) All the children with the exception of John can climb around on the "jungle gym" and thoroughly enjoy it. Pat is restricted to one corner where the teacher can be especially watchful because he must avoid any bumps on the head (because of his overweight he is particularly liable to falls). Jimmy, Phyllis and Dickie enjoy turning over the bars while Ruth practices a new trick—hanging by her knees and then turning a somersault. A few minutes of this and then all the children run alone to the side of the greenhouse where they play a game they have made up. Today John is the farmer. All the other children are animals and choose places along the greenhouse wall to be their stalls. The farmer unlocks each door in turn and the animals go out to the pasture, galloping, waddling, plodding or running as the case may be, as they neigh, quack, etc. While the animals are running around the pasture, one child at a time practices jumping rope with the teacher When everyone has had a turn, all the children, walking independently, go back to the classroom where Jean and Pat put down the "sitting mats" for singing. Singing is followed by lunch and a free period when each child chooses some form of handwork or play until the piano signal to gather for story hour. The story is terminated in time for the children who still wear their club pins to choose pictures to paste in the books which they will make to take out on Friday. As the children are dismissed, John tells his mother who has come for him, "I didn't get a picture tonight, but I bet I will keep my fingers out of my eyes tomorrow!"

BLIND FOLK AND THE WRITTEN WORD

MARIE LIEN
Braille Teacher, Minnesota Braille and Sight Saving School

The written word has since the dawn of history played an important part in the affairs of men. The hieroglyph of the Egyptians, the cuneiform character of the Chaldean, and the alphabet of the Phoenician, subsequently adopted by the civilized nations of the west, all serve to record the thoughts and deeds of the ancient world.

Until the introduction of printing at the beginning of the modern era, access to the written word could be had by but a few. As books multiplied a reading public began slowly to develop. Century by century the written word became understandable to a greater and greater number of men everywhere, until now the percentage of literacy

in every enlightened country is very high.

Only within the last century and a quarter did the written word come into the world of blind men. True, some blind persons enjoyed an acquaintance with the literature of their time by having it read aloud to them, but not until a system was developed by which they could themselves both read and write, can it be said that they have found their way to the written word.

Of the several systems of embossed writing in use at one time or other, the one originated by Barbier and perfected by Braille has at last attained the ascendency. It is with the methods used at the Minnesota Braille and Sight Saving School in the presentation of this Braille system that this paper deals.

Prospective students of Braille fall into two groups. The one is composed of those who have already learned to read, when loss of vision occurred, the other of children already blind when reaching school age.

Concerning the teaching of the first group very little need be said. The letter method is used. The alphabet is, however, not presented in sequence but in a manner conforming to the system upon which the Braille alphabet is built, yet in such a way as to facilitate the formation of words as early in the course as possible. Thus the letters a, b, c, k, l, m, are taught in that order. This makes possible the use of such words as cab, back, black, lamb, call, and others. One can then write the sentence: "Call a cab, Mama." Next the letters d, e, n, and o are introduced. This greatly enlarges the reading vocabulary. One can now read such sentences as: "Alma, bake a cake." "Ned can load a cannon." and so on. Then follow f, g, p, q, and, since q is of no practical value alone, the letter u must also be presented at this point. The remaining letters are added in the order h, i, r, s, j, t, v, x, y, z, and since w is the only letter that does not conform to the system, it is taught last. Word and exercise drills are given after the introduction of each group of letters.

Regarding the second group, the one which in our schools is essentially like any group of normal children entering the first grade of the ordinary public school, a more detailed discussion seems called for. These, like all little folks, have as yet not met up with the written word and though they approach it by a different avenue of contact than do the sighted youngsters, yet the approach itself may be made in essentially the same way. As in the teaching of print, so in the presentation of Braille the "Word Method" with certain adaptations has proven very effective. Of course, certain adjustments have to be made. The teaching must be done individually for obviously a flash card displayed before the whole class is of no value here. The word to be learned is written in Braille, grade one, on cards about one by four inches in size. Each child is then given one of these cards. To show him how his card should be placed for correct reading the upper left hand corner is cut off. In this way from three to five words can be presented at a time.

Just as in the ordinary first grade reading, class interest is stimulated by pictures showing Ned with his dog, and Jane, rocking her doll, so in the Braille class some activity must be added to lend zest to the work. Games and other diversions that still keep the written word before the student have been found very efficacious. A few examples of this kind might be of interest. "Mailman" is a good game. At first, teacher is the mailman. A word is put on each child's desk, and if he is able to name it correctly he receives a letter. If not, the letter is returned to the mail bag after the child has been told what the word was. On a second trip the postman may and often does give the same word to that child in the hope that he will recognize it on the second try. An imaginary trip is another good game. Each correct word represents one state of the journey. The first word correctly read entitles the child to go out to the local bus stop. The second word entitles him to enter the bus. The schoolroom is laid out to represent the several parts of the trip. We also play baseball, conduct egg hunts, and in general try to stimulate activity and interest in any way that the ingenuity of the

teacher suggests. Needless to say, this plan entails a considerable amount of extra work for the teacher. To be sure we have one set of words written upon celluloid cards, which wear a long time and are washable. For this idea we are indebted to the Primary Department of the School for the Blind in our sister state Wisconsin. This is only a beginning, however, and it is necessary that teachers supplement this with a large number of paper cards, which the children may earn. Then, too, the life of these cards is comparatively short. As soon as practical, sentence sheets are Brailled and these in turn are followed by short story sheets. As each ten of such story sheets are correctly read, they are made into book sets with colored construction paper covers. These the children take home. This, we have found, interests not only the child, but the home folks as well.

The words used are, of course, taken from the particular pre-primer, which we are to study. The teacher's story sheets aim to present the words in a different order from that in which they occur in the book and so preclude the possibility of the child memorizing the stories. He is now ready to read the basic pre-primer. From now on the new words are learned from the word lists presented in each succeeding book.

Grade one and one half, and two, Braille, as used in our schools are open to the objection that they afford the student no adequate picture of the words, which he reads. This is a contributing factor to the admittedly indifferent spelling prevalent among blind people. There are some one hundred and forty whole word contractions in grade two, about thirty-five, which are likewise used in grade one and one half. These the sighted reader meets in their entirety times without number. So he carries with him a mental impression not only of the sound of the letter combinations but also of their appearance. The saving of space is indeed an important consideration in the printing of Braille; yet it cannot be denied that the person to whose mind the word knowledge brings simply the letter k is certainly at a disadvantage in the matter of spelling. We, in Minnesota, have sought to meet this objection by prolonging the period during which only grade one is studied. We hold that the plastic mind of childhood is more impressionable during the earlier years; and, if ever a lasting picture of words in their entirety can be formed upon it through a touch system, it is then. We feel that the negligible amount of time lost in the seeming duplication of learning first, grade one and then grade one and one half, is far outweighed by the infinitely clearer conception of the correctly spelled word vouchsafed him by our method of procedure. With us grade one and one half is introduced in the second grade shortly before the close of the first semester. Here, too, we follow the system upon which Braille is built. To us the character "and" is not the letter "y" backwards but the letter "f" with the two lower dots added, the sign for "th" is not a "p" turned over but "d" with the lower dot number six affixed. The only three characters which cannot be so taught are "ar," "ing" and the number sign and these we present last using the number system as "ar" 3, 4, 5, etc.

Writing is presented in exactly the same way to all students. The letter method is the only workable one. Here, too, the letters are presented in the order a, b, c, k, l, m, and so on, as explained in the earlier discussion of the letter method as applied to reading. In the first grade, writing is introduced at the beginning of the last semester.

Along with his work, our first grade students are, of course, given from the beginning the regular course in phonics as prescribed by the Minnesota Curriculum of Education.

This, in brief, is the manner in which we of the Minnesota Braille and Sight Saving School present the written word to our blind students.

We do not claim that this is the only method by which this can be done; but, it represents the results of much thought and careful study both on our part and on the part of those who have gone before us in the work. Perfection, we have not attained. What human endeavor has? This

much, however, we can justly claim. We have obtained results—and good results by the use of this method. Our students' average in the reading and writing of Braille is among the highest in the land. Yet in our advocacy of this method or that, of one approach or another, we must always remember it is not so much the method, nay, nor the subject, but the child, who is of prime importance. Too often we are prone to lose sight of this fact in the heated defense of our own particular brain child. Let us remember always that we are not teaching Braille to our children, but are teaching our children Braille.

The task of the Braille teacher then is not to apply hard and fast methods to the teaching of Braille but rather so to understand each individual student that she may best be able to help him find his way to the written word.

REPORT OF SECTIONAL MEETING, TUESDAY, JUNE 25

Kindergarten, First, Second, and Third Grades

Outstanding talks were presented to our group of teachers by Miss Frances F. Tredick of Wheelock College, and Dr. Helen A. Murphy of the School of Education, Boston University. Miss Wheelock discussed kindergarten methods; Miss Murphy spoke of modern trends in primary grade education.

Two papers read in absentia completed the formal program. They were: "The Life of a Kindergarten Child in the Classroom," by Miss Marcella J. Albrecht, of the Iowa School for the Blind, and "Blind Folk and the Written Word," by Miss Marie Lien, Braille teacher, at the Minnesota Braille and Sight Saving School.

Questions and an exchange of ideas followed.

The group elected the following to serve as officers of the group for the ensuing biennium: Chairman, Miss Betty Nye, Perkins; and Secretary, Miss Helena Drake, Perkins.

J. C. Lysen, Chairman

MAP WORK IN THE ELEMENTARY GRADES

MRS. HUGH D. JOHNSON

Maps used in the classrooms of the schools for the blind fall into three general classifications: first, non-dissected relief maps and globes; second, Braille maps; and third, dissected non-relief and relief maps.

The old relief maps were made of papier-mache and muslin, wood, or metal. Of these the papier-mache, although no longer on the market, are the most useful. These were made with the same type of relief as the modern maps, but didn't hold up nearly so well, and were much harder to keep clean.

The majority of the globes available are the twelve-, sixteen-, and eighteen-inch ones used in sighted schools, libraries, etc. These must be adapted for use by the blind by the application of some pliable substance that will bring the land areas into relief. I use plastic modelling clay, and put each country in a different color. It is not necessary to go to this extra trouble, but the contrasting colors are an aid to both the teacher and the partially sighted child.

Braille maps, such as the set put out by the W.P.A. and the Perkins Institute's "Map-of-the-Month," are of limited use in the elementary grades. There are several reasons why this should be so, among them the fact that Braille maps demand a high

ability in Braille itself and a background in map-work that these children are not likely to have. In using these maps, there is so much jumping about from key to map, with consequent loss of place, that they fail to appeal to the younger students. In the upper grades, these Braille maps are of much greater value and may be used with far more accuracy and satisfaction. The relatively simple Braille maps that are found in textbooks are quite easily understood, particularly when they are used in conjunction with relief maps. These textbook maps are a fine bridge to the more difficult types mentioned before.

The comparatively new dissected relief maps produced by the American Printing House for the Blind are the ones most eagerly used by teachers and children alike. These can be kept clean and are virtually unbreakable, an important feature with the blind. Another fine thing about these maps is their use of clear color. Those partially-sighted children we have do enjoy bright things, and these maps seem especially satisfying to them. For the children who can't see, the knowledge that the things they work with are colorful gives them pleasure. It is for this reason that I hang the simple pictures and maps sent out as teaching aids by many leading manufacturers. The interest evidenced by the partially-sighted children prompts most of the others to ask for extra minutes at the maps. The wooden dissected relief maps of the continents and the United States are sufficiently large for teaching all the geographical terminology. The special delight of all my classes is the desk-sized hard rubber relief map of the United States. The dissected non-relief maps are chiefly valuable for drill work and aren't really needed if the relief maps are available.

When our children reach the fourth grade they probably have had only slight experience with maps and globes. Possibly the easiest introduction to these tools is through the use of a globe and a world map. In most schools the courses of study in history and geography are roughly parallel, starting with the period of discovery and exploration in history and a general survey of outstanding regions in geography. Before using the actual map or globe, I have found it advantageous to make a model, in clay, of the schoolroom, so that the children may understand that a map or globe is only a small-scale representation of a much larger area. With the globe, I generally show first how the earth, moon, and sun are related in movement. A clear space on the floor, and unshaded light, and some crawling are essential at this point. For those who have no useful vision, the light is brought close enough to the globe for its heat to be felt. When this idea is sufficiently grasped, the globe itself is explored. Now the continents, oceans, temperature belts, and general directions are taught. Continents have easily recognizable positions and shapes and are soon learned tactually, as are the oceans. The world map is the next step and the shapes of the continents are quickly recognized. During the first year I stick to these two maps, or rather, this map and globe, augmented by the detailed textbook maps. If the class is particularly eager and is quite capable of further work, the larger continental maps may well be used, particularly the map of North America. If you are possessed of an older paper relief map of the world, routes of explorers and geographical journeys may be marked upon it. Tacks with a variety of colors and heads may be pushed into it and heavy string may be run from one tack to the next. If you have no paper maps, different types of buttons held by scotch tape will take the place of tacks.

In the fifth and sixth grades, more detailed study of geography and a study of United States history require the use of the maps of North America and the United States. A review each year on the globe and world map will be necessary, however, as much of the tactual memory seems easily lost during a long summer vacation. Each year a review should be carried out of such types of land and sea areas as capes, peninsulas, plateaus, plains, lakes, etc. A weekly or bi-weekly period for the location of places mentioned in the news should be set aside, if no current events period is available.

The legend for each map and the names of countries and states should be Brailled, shellacked, and pasted or taped on the large maps for greater ease of use. Many people seem to feel that this practice defaces the map, but these maps are for use and the children should have as much information as possible. After all, sighted children have far more information than this printed on their classroom maps.

In the fifth grade, the making of clay maps by the children themselves can profitably be begun. A relief map of the United States is not too difficult a task, and besides, teaching geography is an excellent help for those children who have difficulty in using their hands. The new dissected relief map of North America is a fine one for this purpose. The United States section may be removed and used as a model. Long rolls of plastocene clay will form the borders and coast line and may be filled in with more clay to show the elevations of the various natural regions. These are best made on smooth surfaced beaverboard, or other similar material, that has a rim of moulding. Partially-sighted children will enjoy using different colors for the different regions, and the totally blind probably will, too. In the making of clay maps, it is important to remember that the individual child should do his own work and that his map should be meaningful to him, whether or not anyone else can use it. These maps may be used constantly as the United States is studied, day by day, in both history and geography classes. As an after-thought while these are being made, a roller, a spatula, or putty knife, and some sort of apron are essentials for each child. As more localities are studied, in the later grades, clay maps of these may be made. One of the best ways of becoming familiar with something is to make it, and also, the children in our schools will find they are doing much the same sort of thing as their brothers and sisters in public schools.

Since our main aim in the education of the blind should be to give them an educational background as good as that of the normally sighted, and if possible, better than this, this type of map-study should help a great deal in accomplishing that aim.

THE INTRODUCTION OF SCIENCE IN THE INTERMEDIATE GRADES

MAY STELLE

Science should be taught in the intermediate grades. One of man's greatest concerns has been the control of natural forces. Many people spend their entire lives in the study of science, the better of whom have succeeded in discovering some new theory or invention. If the child could be trained in the basic principles earlier in life he would have more time to spend in useful thinking and discoveries. The blind child should have even more opportunity for this type of work for several reasons; 1, his experiences are generally so limited that an earlier start in scientific development might prove to be of great benefit to him; 2, also he is likely to do more constructive thinking. Science should be developed as a way to constructive thinking and a force which may contribute to social good.

The elementary program of science may be affective or inaffective, according to the development of social implications. A relationship between science and man should be established, the invaluable uses of nature and the creative power and impelling forces with which this whole mechanism is controlled. The child's mind at this age is active and alert and if the teacher is efficient and the science program is well developed there will be much benefit derived from it. Many public school systems have inducted the science program into their curriculum and surely it would be a

very practical thing if the schools for the blind could do likewise. The internationalism of science on the elementary level has been stressed by Gerald S. Greig in his "Science in the Elementary School." He has shown how science can be used to develop international understanding through developing scientific thinking about people and through scientific knowledge which is international in scope. He suggests these topics as centers of interest: "The earth and its story," "Conditions necessary to life," and "Variety of life."*

In these days of a changing world it is only natural that children even of younger ages should feel the effects. They are naturally becoming interested in other subjects. The increased interest in science even among the younger grades is surprising. If they are properly guided they will respond readily to a science program. Objects of environment both of home and school are of greatest importance both in maintaining and extending the child's interest. One thing should be kept in mind, that not only should present interest be explained, but further interest should be developed and those already developed should be deepened.

Elementary science has been taught in the past merely to satisfy curiosity. There has also been the idea of gathering certain scientific information. After this there came organized courses in sciences in which the use of important concepts is a major factor. Relating concepts to social experiences of children is a means of contributing to their conceptual development. These concepts in the hands of a poor teacher will become factual as any previous course. Only too often is Dewey's condemnation of the sciences program justified:

"How far is science brought in relation to its social consequences, actual and possible, if the resources which science puts at human disposal were utilized for general democratic social welfare? I know that very good improvements are being made, but I am afraid that science is still taught very largely as a separate and isolated subject and that there are still those, including many scientists themselves, who would think that that wonderful thing 'pure' science would be continued if it were brought into connection with social practice. Yet without the connection, students certainly are getting very little intelligent understanding of the forces that are now making human society and might remake it."*

Elementary teachers are becoming increasingly interested in the developing of concepts through the use of scientific experiences. Elementary experiences in science should result in four things:

1. Understanding that science can change man's natural environment, his social environment, and his intellectual life.
2. Broadening and developing certain scientific concepts and generalizations.
3. Increasing the number and depth of interests.
4. Developing the scientific method as a way of thinking.

Experiences are a part of the same goal. Give two classes the same materials, one might gain almost nothing toward the goal while the other might gain much. In the second class the teacher used the materials and the experiences to develop definite plans, not as an end in themselves.

When the matter of introducing science into the intermediate grades comes up, the question is always asked: "How can we possibly find time for another subject to be put into our already crowded curriculum?" Listen, we cannot afford to deprive children of a subject which is so important to their everyday life and to this changing world. At this step of the child's life science can play a very constructive part. It does not have to be set aside from all other subjects but can and should be correlated with many subjects. For instance, reading could easily be worked in with the science program which would give the child a definite purpose for reading in

* Gerald S. Greig, "Science in the Elementary School," Thirty-fourth Yearbook of the National Society for the Study of Education. Bloomington, Ill. Public School Publishing Co. 1937.

* John Deway, "The Challenge of Democracy to Education." Progressive Education Vol. 14, Feb. 1937, pp. 82-83.

which he was especially interested as well as developing his reading ability considerably. Also from the material, spelling words could be obtained which would be of much value to the child. Educators of today place so much emphasis on purpose. Science provides a real background for objectives for each lesson. Reading is sometimes difficult for children because frequently it is foreign to them. Science would correlate it with something with which they were familiar in their own environment and thus bridge the gap between toil and pleasant associations. This field provides an opportunity for using real experiences.

There are so many ordinary things in which a child is interested; the weather, the seasons, the sky, night and day, his pets, and himself. He might be curious to know how his toys are made and what makes them run. He wants to know what makes his kites fly and what keeps his boats afloat. He wants to know about what lives in the oceans, rivers and ponds, about animals in the woods and fields, and about ants and other insects. He wants to know what makes the caterpillar turn into a butterfly and a tadpole into a frog. The child will profit greatly from reading based on these interesting subjects. Teachers sometimes feel that if they are not specially trained for the field of science that they are not capable of teaching it. In many cases, however, this is not true because the program can be made so simple and yet so interesting to both pupils and themselves that it could be easily carried on with a few materials and books. If the teacher would provide activities which promote scientific thinking and keep the subject matter at a reasonable level for the child to understand, the correlation of science with other subjects will not be difficult. If children are taught to read with a definite purpose they realize the value of it and look upon it as a source of information and thus make real progress in it. The word "science" is much abused and has many different meanings for different people. In the intermediate grades it need only mean the child's interest in his immediate surroundings and help him to solve some of the problems of his daily life. It should not become so difficult that it will be above the level of the childish mind and involve technical problems which are not even in the elementary textbooks. It should be the child rather than the teacher who assumes the responsibility of looking up information to solve his own problems. The part of the teacher is to guide the student and help him to secure needful information. With this kind of a science program the teacher is strengthening the child's security in the world in which he lives and laying a greater foundation for further development.

In probably no other field in the intermediate grades is there a subject which has a more vital interest already developed than science. The teacher need not stimulate the pupils but guide them properly so that their experiences will increase their understanding. Needful in this process is the use of materials which are on the level with the maturity of the child. A careful study of the children in each class will be absolutely necessary to understand the mental level of the group and of what each individual is capable of doing. Conclusions must not be jumped at and a careful research should be made. One difficulty in planning a classroom program to fit the children is that their interests differ. Some are interested in one particular thing while others wish to study another. It will take skillful management of the teacher to decide which should be taken first, but in time as many fields should be covered as possible. Methods, time and procedure will have to be worked out even in the face of difficulties. But this one factor will stand out, that of the environment of the child and the school. On these two things a program can be based, but always keep at heart the interest of your pupils and the program will gradually unfold itself without too many difficulties.

The same general principles apply in guiding science experiences as those in guiding all fields of the elementary school. There is a list which may be of value to teachers in this field and they would do well to be familiar with it. J. C. Parker developed and presented this list in the

Fort Worth course of study in the elementary schools.

Scientific learning is brought about mainly through experiences. The extent of and selections of experiences are the determining factors in which learning takes place. Developments of unrelated experiences will end up with very little growth of the pupils. A group of carefully planned experiences looking toward some particular goal will end much more satisfactorily. The weakness in the practice of activities is that so many teachers feel that most any experiment is valuable as long as it is an activity. Too little attention is paid to the outcome of the activity. More and more attention is being given to the result of experiences and the effects on the children rather than the activity itself, as an end. Experiences are invaluable in the solving of children's problems. The learning procedure consists of three steps:*

1. A formulation of the problem.
2. The collection and evaluation of data.
3. The organization and presentation of data.

Illustrations of actual science experiences are listed below:

Collecting and evaluating data
- Taking excursions
- Making collections
- Caring for animals
- Growing plants
- Naming and identifying
- Observing (immediate, long periods)
- Analyzing (contrasting, comparing, classifying)
- Experimenting
- Listening
- Reading
- Testing

Organizing and presenting data*
- Expressing graphically (draw raised lines or dots)
- Constructing
- Writing
- Exhibiting
- Dramatizing
- Discussing
- Planning
- Recording and listening
- Expressing aesthetically

Environmental experiences are of the greatest importance for science experiences. A teacher in the school for the blind, of course, runs into many difficulties here as the children come from different sections of the state as well as other parts of the country. A thorough study of this problem will have to be made and worked out. It may be best for the class to start as a whole with the environment of the city in which the school is located and eventually dividing up into separate units. It may be that children even from different towns but from the same section of the state may be grouped together. A unit on the state as a whole may be begun and eventually branching into the different environments. The teacher, after a survey of her class will be able to decide this problem. It is not altogether necessary to study according to environments, this is just for practical suggestion according to previous experiences. There are always other subjects as: weather, birds, animals, races, fish, plants or any other particular interest of the class.

If the teacher and the class wish, and if time and equipment permit, a separate specialized science class may be organized in the fourth, fifth and sixth grades. However, it is well to keep in mind always the correlation of science with other subjects and work to this end. There have been many courses of study written over various periods of time but at intervals someone comes out with a better plan. A good teacher with a poorly arranged course can take it and do a good job with it while a good schedule in the hands of a poor teacher is almost worthless. The teacher is the determining factor of science work in his or her class. No matter what organization is followed there are many opportunities to utilize it in the science program. The opportunities should be capitalized and stressed for the benefit of the child.

* Taken from "The Child and His Curriculum."

They become the source of interest which will change his whole outlook toward his whole curriculum. They may even change him from an unsatisfactory pupil to a very satisfactory one.

Due to the fact that this program of science is a relatively new one in the elementary schools, material has been inadequate, so many states and large cities have ventured forth with their own research work and science programs. California recognized this problem and that of unpreparedness of teacheredness of teachers, so the state department published a series of monthly bulletins. Each copy gave a different topic which could be used as a source of material by the teacher. These pamphlets, however, were limited by subject matter experts to background material which made them somewhat useless for a teaching unit. Michigan stresses the large units of work with a combination of experiences from all areas. On each grade level there is a list of suggestions, objectives and activities. These are classified in seven areas, of which science is one. The work of the second and third grade is further directed toward helping the child in making observations. In the fourth and fifth grades the experience is broadened, observations are continued, collections are increased and investigation and reference work is begun. These activities bring about the development of the scientific habit. From here the sixth grade departs and deals with health and hygiene. In Pasadena the work of the elementary school is organized around several large units for the year's work. Listed among these are the opportunities for science experiences. This also involves the matter of correlating the science program with other subjects.

The teacher should not only be a good science teacher but should also be an expert in "relating science" to her children. If not, then she needs help. A teacher may have majored in science in college and know all the important facts and yet not be able to expound her knowledge to cause the greatest growth in her children. "Suggestions to Teachers" provides much of the help that teachers need in this field. There are three suggestions given:*

First, grade expectancies.
Second, approaches, learning experiences and culminations.
(These include science activities.)
Third, science activities in addition to those which would grow out of the unit of work are provided for in a separate section for each grade.

During the first five grades of the elementary school there should be a thorough background of science. The child should know the methods of making records, making reports, and how to do sufficient research work in any field of interest. He should know quite well his environment. The teacher of the sixth grade should so direct her program that knowledge and understanding will reach a proportionate appreciation of life. As the sixth grade is the last of the elementary school, the teacher may check up on the pupils and find out just in which points they are the weakest and give attention to them. The teacher may also enlarge upon some program or subject already given, or give more details, recalling previous facts and enlarging upon the subject in general. In this manner the intermediate science program will be effective.

In order to teach our children intelligently and fluently there are a few basic principles which we should first remember ourselves.

1. That the Creator of the universe still lives and is ever-present.
2. That this earth is just one of many worlds.
3. That each of us is one of millions of creatures.
4. That the impressions we make on children's minds are lasting.
5. That we as teachers are responsible for their right development.
6. That the world is what we help to make it.

This paper has been given careful thought and consideration. Most of the

* Taken from "The Child and His Curriculum."

material given has already been used in the instance of blind children and found possible. It has been written with the interest of the blind in mind and especially that of the fourth, fifth and sixth grades. Science should be developed in the intermediate grades as well as in the elementary school.

REPORT OF SECTIONAL MEETING, TUESDAY, JUNE 25

Fourth, Fifth, and Sixth Grades

Meeting was called to order by Mrs. Elizabeth Carpenter, Chairman. By vote of those present, Mr. Benjamin Smith, teacher of six grade, Perkins Institute, was made new chairman, and Mrs. Hugh Johnson, Social Science Teacher, Maryland School, was selected as secretary.

Mrs. Carpenter then introduced Dr. Helen B. Sullivan, School of Education, Boston University, Boston, Mass. Mrs. Sullivan spoke on "Modern Procedure of Teaching in the Elementary Grades."

Following questions by members of the group, which Mrs. Sullivan answered quite fully, Mrs. Hugh Johnson read a short, but very comprehensive paper, on "Map Work in the Elementary Grades."

Due to the absence of Miss May Stelle, Florida, the final topic for study, "The Introduction of Science in the Elementary Grades," was omitted. Her paper will be included in the Proceedings.

M. Blye Allan

MATHEMATICS FOR HIGH SCHOOL STUDENTS IN SCHOOLS FOR THE BLIND

EDWARD J. WATERHOUSE
Perkins Institution and Massachusetts School for the Blind

The question, "What Mathematics shall we teach in schools for blind pupils?" is not a new one, but I think the events of the past few years have emphasized some of our problems, bringing them into sharper focus.

As far as the teaching of mathematics is concerned, the war seems to have taught us two things here in America. It showed that a practical mastery of mathematical skills could be acquired by the average technician, man or woman, adult or teenager, in short order, either on the job, or in special factory courses, or in night school, and this in far less time than usually spent in high school courses. Perhaps the National Educational Association Committee members who recommended that we teach less mathematics in high schools had this lesson in mind.

On the other hand, the war revealed a serious shortage in mathematicians on a higher level. Many engineers and other professional workers were found deficient in mathematics. Possibly the Harvard Committee who recommended that we spend more time teaching mathematics in high school were thinking about this experience.

Now where do we stand between these two divergent trends? First, I think we have to remember that very few of our pupils are going to make any practical use of mathematics (exclusive of arithmetic) after leaving school. Very few go far with the study of mathematics in college. The basic objection, as I see it, to the conventional courses in high school mathematics; algebra I and II, and plane geometry, is the fact that they are largely preparatory

for work in advanced mathematics, science, engineering, and so forth, and these are fields from which most of our students are excluded. Is it possible to teach courses in mathematics which give some idea of the subject as a whole, with glimpses of some of its many branches, an introduction to the various mathematical techniques in use in solving difficult problems, and the fascinating interweaving of the different branches into one another?

Such a treatment would involve some work in arithmetic, with perhaps a little of the theory of numbers. It calls for sufficient algebra to include logarithms and quadratic equations, and preferably something about permutations and combinations and the theory of probability. It means that trigonometry must not stop with the solution of right triangles, but should preferably include the functions of the sum of two angles. It requires a certain amount of plane geometry, but only a fraction of the amount usually studied . . . perhaps six weeks of work . . . and some analytical geometry with an introduction to non-Euclidean geometry. This last subject is being taught now in some public high schools, including our neighboring system in Newtown, Mass. The differential calculus is too important to omit, with its basic ideas of functions and limits. Something would have to be mentioned of integral calculus.

Obviously such a course, given over three years or less, would treat each branch very superficially, and many objections could be made to the plan as a whole, and to the different parts separately, but unless we are to be content to leave unbridged a widening gap between our pupils and the average well-educated young man and woman of today, some such drastic change in curriculum is called for. At Perkins we are moving hesitatingly towards such a plan. How far we will progress is still uncertain, but our ideas are here presented for the purpose of discussion and criticism.

At present we have no suitable Braille material for much of this work. Something new is needed; we at Perkins do not claim to know just what it should include.

In closing I would like to describe a step we have already taken. We have put into effect an active program for instruction in the use of logarithms. We discovered recently that the Braille logarithm cards used in class over the past seven or eight years, were, in a few cases at least, being used by graduates in college and after. This encouraged us to give wider and more intensive training in the use of these cards to our pupils. During the past year, a ninth grade group of average and slightly above average pupils were given a streamlined course in algebra to enable them to understand the theory of logarithms. They were then instructed in the use of the cards. Frequent assignments were then given in their use, with intervals of several weeks between them in which no reference to logarithms were made. It was found that the tricks involved were usually remembered very satisfactorily, and the class average for these assignments exceeded 95%. An accuracy in answers of 99.9% was required. It is proposed to assign further work at intervals during the next one or two years to discover whether the use of logarithms can become a fixed habit, requiring a minimum of conscious effort. If the results are satisfactory, we think we will have found one way in which the problem of performing tedious computations can be solved for blind people. The cards, incidentally, although there are 99 in a set, fit easily into the pocket.

TEACHING ENGLISH TO THE BLIND UNDER THE NEW YORK STATE REGENTS SYSTEM

BYRON B. BALLARD
New York State School for the Blind

Without doubt many of you have either read or have heard about the New York State Regents examinations. Some of you have concluded that these tests are rather efficient means of checking the type of teaching being done by the various schools. This is to some extent true. Others have come to the conclusion that they are designed to compel the teaching of the classics to the exclusion of other subjects, and that they attempt to meet the requirements of various colleges and universities throughout the country to substitute for their entrance examinations. This may also be true. During the war a third group sprang up which claims that these tests tend to militate against progress, especially in the vocational and social studies fields. This group is also right to a certain degree. Whoever is right, or whoever is wrong, we still have the Regents system in New York State; and it is up to us in the schools for the blind to meet the requirements for the examinations.

In the field of English, in which we are interested today, a comprehensive examination covering the work of four or even of six years is given. Passing this three-hour test is the only way that a student can become eligible for certification to receive four units of credit toward his graduation from high school. If he receives a mark of sixty-four or below, he must wait another half year before trying it again.

In spite of what has been said about them, these examinations are not especially difficult. That is, they are not any more difficult than other general comprehensive tests in other states. To the blind student, however, this is an ordeal which demands a great amount of nervous energy and hard work. In the first place, it is necessary for the blind student to have the test in Braille. It contains from sixteen to twenty-two pages in Braille. For the slow readers to read this amount of Braille and to answer all the questions is obviously almost an impossibility. In the second place, it is not permitted to the student to answer the questions on the typewriter. He must place the answers to the objective part of the paper on the paper itself in ink. This means that he must have an amanuensis to write for him.

I am not prepared to say that any of my students have ever failed this examination because of lack of time. Only three hours are allowed, and the time requirement is strictly enforced. I do believe, however, that their marks would be higher if even a small extension of time were given. Because of this added handicap of lack of time, it has been suggested by various teachers of the blind that a time extension be granted to us by the State Department of Education. To this suggestion many do not agree. It may be relatively unimportant; but it seems to us that we would rather make sure that we were competing on equal terms with the sighted students even though we have to be more efficient than they to attain the same goal. We are justly proud of the standards we are maintaining, and we do not want to see the bars let down in any way, allowing loopholes through which these standards may be lowered later.

So much for the mechanics of the examination. The State Department of Education has published a syllabus in English for secondary schools which contains 299 pages of instructions to teachers of English. This 299 pages (fortunately for us) does not contain a specific outline to follow, nor does it present a single plan for teaching or for arrangement of subject matter. It is very general, and sometimes vague. To sum up the whole book, one might say that it tells you to teach English, which is about the most important subject taught in high school. It says one thing more. It says that a final examina-

tion covering certain general topics will be made up from some of the suggestions, and that the examination must be passed by all students receiving an academic diploma.

Now the question comes, what does this mean to us who teach in a school for the blind? In Batavia, it happens to be my lot to teach all four years of high school English. This means that, under the syllabus, I can make any plan I choose, and can teach it in any way I wish so long as the students pass the final examination. In the seven years of teaching English in the State of New York in a school for the blind, only three of my students failed to pass the final examination; and, when these papers were sent to Albany, they were raised to 65, and the students received their diplomas. With this in mind, then, may I present briefly some of my goals and aims in teaching English. To the experienced teachers, there is certainly nothing new; but to some beginner, there may be a hint or two which may be helpful.

First, it seems essential that every student who enters first year English should be able to read and write Braille sufficiently well to enable him to do his assignments. He must also read it with his fingers. Sight-reading of plays in class will soon convince a student that he belongs in a Braille reading class instead of in English. Second, since we have a specially trained speech and dramatics instructor, any student notably deficient in oral English, especially if there is a defect, is requested to take corrective work. This means that time is left for the usual book reports, practice parliamentary procedure, debates, and general discussions.

The new M. O. S. English workbook, recently put into Braille, offers excellent opportunities for drill in spelling, grammar, and punctuation. One book each year is sufficient, and it seems that little is gained by asking the students to spend their time writing out exercises. Oral recitation is effective if it is possible to hold interest through contests, games, and the general pride of the student. At this point it must be noted that grammar, spelling, etc., are not the task of the English teacher alone.

The aim of the social studies teacher may broadly be to secure an understanding on the part of the pupil of our democracy, and of society as it applies to the individual; that of the science teacher is to help the student to understand environment in all its phases, and to adjust to it; that of the vocational teacher is to train the student that he may earn a living; and that of the English teacher (according to the syllabus), is to help to guide the student in his gaining of a workable philosophy of life taught through literature in all its phases. With this in mind, we come to a discussion of the teaching of literature and composition.

Selection of literature is important in teaching blind students how to live and to think. It is the task of the teacher to have clearly in mind exactly what is to be brought out in every piece studied, otherwise the time is wasted.

The examples given in the Prose and Poetry Series now in Braille are exceedingly well-chosen for their definite problems to be studied. There is no lack of good material available in Braille; and the Talking Book offers an excellent selection of books for collateral reading.

It is no easy task to get students to appreciate and to like poetry; but drama always seems to have a great appeal because the action is emphasized, and the problem, and not vague description, which is not easily comprehended by the blind. Again, the selection of material, which should be graded carefully to meet the development of the class, should be emphasized. Do not start with Boewolf or Shakespeare. By the end of the fourth year my students have studied in class or in an English club, which meets once a week, ten plays of Shakespeare, several Greek dramas, two of Milton, and many modern plays of Rostand, O'Neil, Ibsen, etc.

The object of this is twofold. First, it trains the student to appreciate good literature which is really available to him after he leaves school. The second objective is that an unlimited opportunity to teach mental hygiene is offered. Through class discussion Silas Marner and Old Hebsaba Pyncheon have problems similar to their own.

These problems can be discussed impersonally and very effectively.

Fifty credits of the final examination require definite skill in creative writing. The intent and climax of the whole course, then, comes when the student can write. He must be able to think clearly and at times originally; he must have had sufficient practice to enable him to use the mechanics of writing well, and he must above all, be able to produce rapidly. Ability to write should be encouraged. Subjects for composition should be interesting and challenging; and if papers are corrected in class in an interesting manner, the students will gain by the errors of others and they will vie with each other and with themselves to improve their style and their technique.

A final suggestion is that the teacher read the compositions to the class, allowing the students to criticize them freely without knowing whose composition it is. It is also useful and stimulating to the students to hear works of former graduates and the teacher herself should frequently do the assignment; and "it better be good." I keep on file all papers written by all students, which can be brought out to show progress, and to amuse the class when stimulation is needed.

In conclusion, may I say that I am sure I have said nothing new. The New York State Regents examination in English is a challenge to me, and I hope it is a benefit to the student who honestly prepares for it.

TEACHING THE SOCIAL STUDIES IN SCHOOLS FOR THE BLIND

BENJAMIN BERINSTEIN
New York Institute for the Education of the Blind

Implicit in the topic, teaching the social studies in schools for the blind is at least the thought that such teaching presents problems different from those presented in teaching the social studies in schools for the seeing. It therefore seems necessary to determine whether such different problems are presented and if so, whether and to what extent they are susceptible of solution.

Such problems obviously cannot be concerned with the content of the subject matter to be taught. The social studies include an examination of the development of world institutions through a study of world history; the acquisition of a working knowledge of American history with special attention to our Constitution and the operation of our government and the gaining of an understanding of our institutions and traditions, and, finally, in New York State, at least, a reasonably thorough analysis of the problems of American life both past and present. Such instruction is deemed necessary as part of the program to develop intelligent citizens and thus to insure the safety and continued progress of our democracy. We should not, if at all possible, we must not be satisfied with less for our blind students.

In order to accomplish this result, there must be available suitable teaching material and practical usable tools of learning. It is at this point that we begin to note our special problems. For the seeing there are numerous good textbooks which can be changed as often as better ones appear. Our students have a very limited supply of such books and are often obliged to use texts many years out of date. For the seeing there are large libraries containing truly vast supplies of material for supplementary reading and research. For our students there is very, very little, and of that little much is either out of date or not easily available. For the seeing there is the almost endless realm of newspapers, periodicals, weekly and monthly, pictures, cartoons, blackboard materials, maps, graphs, and other visual aids which give

added life and substance to the subject matter. From this realm, with the exception of one or two periodicals, our students are barred. For both groups, there is much valuable material available through the radio; but even here, because of the nature of our school schedules, our students miss most of what could be obtained. It would seem to follow that the problems of the teacher of social studies in schools for the blind are quite different from those of the teacher in schools for the seeing. He cannot rely on the textbook to the extent that is ordinarily possible and yet he is often compelled to do so. He is strictly limited in the amount of supplementary reading that can be required. He must, if at all possible, find other means in place of the visual aids. He can do very little, if anything, in encouraging and helping students to learn by research how to ascertain facts and beliefs and opinions for themselves. He is usually unable to make adequate use of radio programs and it is not often feasible to give our students the benefit of actually observing the procedure of legislative bodies and the operation of government departments. And yet, the essential subject matter of the social studies must be taught in such a way that our students will come at least measurably near to the attainments of seeing students. In fact, in the State of New York, our students must pass the state-wide examinations given for all students.

It is to be regretted that it has not been possible for me to learn what may have been done in our schools to meet the problems above indicated. It may well be that some of you have found adequate solutions and that the rest of us need only learn about them and apply them. It is my hope that if such solutions have been found you will not hesitate to present them in the discussion. In the meantime I shall venture to offer a few suggestions which, though by no means to be regarded as solutions, may be of some service.

Some method should be developed by which the thought and experience of teachers of social studies in our schools may be gathered together and then disseminated so that all of us may profit.

The matter of textbooks for the social studies should be examined by a group of social studies teachers with a view to seeing to it that really modern up to date books are constantly available in Braille. To use out of date books or books of doubtful value is a crime against our students, quite apart from the fact that it makes their task needlessly difficult. Nor should the alleged lack of funds be permitted to operate against the provision of adequate textbooks. I have no doubt that Congress will supply more money for textbooks the moment the need is stated.

Our students must have the opportunity to enrich their study by supplementary reading. One way to accomplish this is to work out a cooperative plan with the teachers of English under which some of the books assigned for reading in literature will be suitable supplementary reading for the social studies. Social studies textbooks usually contain lists of such material. Under this plan, our students will get some of the extra material they need without increasing the time they must spend in reading. In addition, students will have to evaluate these books from two points of view—literature and the social studies; and should gain better comprehension and greater understanding.

Effective use should of course be made of such Braille periodical literature as is available. This should be supplemented by reading from current periodical literature; but such reading should not be done during class periods since it is vital that the opportunities for discussion by and among the students should be as broad as possible.

All high school students are required to do some projects in elementary research. Our students should not be exceptions. They should be made acquainted with the best known and most available reference works for the social studies and should be taught how to use them. They should be able with the aid of a seeing person of average intelligence but without special knowledge to use reference works and to collate material thus gathered. In order that the burden shall not be too great, each student should report orally to the class

the results of his research. In this way the entire class would benefit. The preliminary training in research will be an important asset to students going on to college.

When possible it would be very helpful to have students follow certain specified radio programs, reporting to the class from time to time or handing in written summaries.

It may be suggested that the textbook material can be adequately supplemented by talks or lectures by the teacher. In the first place, the lecture method does not appear to be suited to high school students. Secondly, in the case of blind students, the mechanical difficulties involved in note-taking are certain to absorb a considerable part of the students' attention. Finally, and perhaps most important, our students must be encouraged to do as much as possible for themselves and to use with such adaptations as may be necessary, and to the greatest extent possible, the methods used by seeing students.

The work in the social studies can be made more vivid and more real if classes are given the opportunity to visit places where the world's work is being done. If possible, students should be taken to legislative halls, courts, government departments, factories, department stores, mail order houses, welfare organizations, and other public and private enterprises. Important as this sort of thing is for seeing students, it is obviously of even greater importance for our students.

Although it is not as easy to give frequent short quizzes to our students as we could wish, this method of keeping the students alert and measuring progress must not be overlooked. Typewriters should be available for this purpose, though there is no good reason why Braille writers or slates should not be used if proper allowance is made for the extra time necessary. Student aid in correcting papers can be easily enlisted if the teacher does not know Braille. In addition oral rapid fire quizzes are valuable and should be used frequently.

It should be noted that the teacher of social studies in a school for the blind, working as he does with very small classes, has the opportunity to do a much better teaching job. He is not distracted by discipline problems nor is he obliged to do the large amount of clerical and other paper work which is the lot of teachers in public high schools. He has the opportunity of getting to know his students better and therefore should be able to give them a greater measure of inspiration, often more helpful to our students than knowledge.

SCHEDULING AND ITS RELATION TO GUIDANCE AT THE SECONDARY LEVEL

ALLAN W. SHERMAN
Perkins Institution and Massachusetts School for the Blind

Scheduling responsibilities rest heavily upon the principal of any secondary school. In schools for the blind, where groups at the secondary level are relatively small, the scheduling responsibility usually falls directly to the principal. He does the complete job in most cases, securing such assistance from his teachers or department heads as he wishes. His is the job of putting together the schedule puzzle so that no pieces are left out and so that each piece fits perfectly against another. This must be done before the opening day of school, and it must be done so well that only a few minor adjustments can be made to have it very workable. This is, in a large part, a mechanical job. Behind the mechanics of the schedule, however, lie many hours of conference with teachers and pupils.

The task of scheduling begins long before the end of the school year prior to

the September in which the new schedule is to go into effect. A carefully worked out plan should be followed if the mechanical job of fitting the puzzle together is to be successfully done, and most important if each individual pupil is to be given an educational experience suited to his needs, abilities, and interests. The schedule is, simply, a vehicle through which the school provides educational life to its pupils. Any school for the blind which follows a rigid block system of daily-weekly planning into which machine the pupils are forced is just not doing the job for its pupils which it should. In considering the population at the secondary level in schools for the blind, we find a wide range in potentialities, interests, and needs. As pupils come closer to the end of the secondary chapter of their school experience, these differences become more apparent. The school must recognize this wide range of differentiation among its pupils, and its scheduling must make it possible for each pupil to have that program which he needs. To fit the maturing pupil into a rigid course of study pattern and schedule is just wrong. The schedule may well be either the way to a rich experience or a route to poor study habits, lack of interest—educational poverty.

One great weakness of a schedule plan based on a rigid course of study is that it does not permit the individual pupil any share in the planning of his own educational experience. The planning of his own program is as much a function of education—the making of wise, reasonable choices—as is mathematics, social studies or manual training. On the other hand, a free elective system would undoubtedly produce chaos in scheduling. We are all for a free elective system in spirit, provided it is tempered with good, sound educational guidance. It is almost a platitude in teaching that a pupil learns poorly unless he sees some sense in the "stuff" which is being presented to him. This is just as true in setting up a schedule. The pupil should have a share in making his program. For example, if he is in the ninth grade and wants to take Latin and his abilities do not seem to be in that direction, this fact should be explained to him. If he does not see why, then let him try Latin for a while and really experience why it was unwise for him to try it. The time is probably not wasted. If we expect anything from education, we should expect the student to learn to know himself. Cooperative educational guidance is the answer.

But you will undoubtedly say that the principal does not know everything about every pupil. He ought to know, however, pretty much what the aims, ideals, ambition, needs, and abilities of his pupils are. We have good teachers to help, educational measuring instruments of proved worth to assist us. To sit down and talk with the pupil concerning his standing educationally in terms of a program of study is the responsibility of the schedule maker. Speakers on the subject of guidance at this convention will explain, I am sure, that a concept of guidance which considers only vocational guidance, spiritual guidance, or educational guidance is not a realistic one. We must guide the "whole" child. Guidance is a term used to define the real function of an educator. The schedule maker must be an educator, not simply a skilled puzzle maker. How should he proceed to do the real job of combining his puzzle making with guidance?

Certainly he should turn for assistance to his teachers who know, through performance, the abilities and needs of his pupils. The placement of a pupil in a certain section of mathematics should be dictated, not alone by the grade of the pupil but, rather, by the ability and progress which the pupil may make. The teachers of a department should assist in the making of sections, and in so doing, they should have a clear understanding of our concept of guidance. Homogeneous grouping in terms of ability, rates of probable progress, and in terms of material to be covered seems wise at the secondary level. For example, in determining our mathematics sections at Perkins for the next school year, we have spent at least ten conference hours in making sections. In many instances our groups cut across grade lines. To schedule these sections is a very difficult task. Only as we are suc-

cessful in it will the experience of each pupil involved in mathematics be most worth while. In addition to this plan of cross-grade sections, we shall try to schedule classes which are relatively close together in terms of advancement in the subject at the same hour each day so that transfers can be made between sections without disrupting the entire schedule. The desirability of such fluidity in programming is obvious. Naturally, it cannot always be done because of lack of teachers. It is a very desirable plan, however, and should be followed whenever possible. In certain subjects where present learning does not depend so much upon a maintained continuity of presentation—history or geography, for example—it would seem preferable to offer such subjects in alternate years to meet the teacher problem.

As we have previously indicated, it is most desirable for the schedule maker to plan for individual conferences with each pupil. This is probably done preferably after conferences have been held with teachers or department heads. This is a long, tedious, though rewarding, job and should be planned well before the end of the school year. In a large school, it is very desirable to keep a very brief record of each of these conferences. Such notes might well be kept on a program plan card such as will be explained later.

Teacher assistance in guiding pupils realistically is most desirable and probably the most important aid to the schedule maker. There are, however, many other aids which should be used. The schedule maker must gather as many facts as he can about the individual pupil with whom he is to have a conference. Most educators recognize the strength of a carefully planned testing program. Such a program should include frequent mental and achievement testing. Also desirable are mechanical ability tests and interest and vocational inventories. Every school should have a staff member trained in the administration and interpretation of tests. The schedule maker should also know how to interpret scores, and he must have, in addition, a wide judgment in interpreting test results to individual pupils. Tests are not mysterious devices, and properly understood and explained, there is no reason why individual pupils should not have their test results known to them. The schedule maker should use test results in planning intelligent and realistic programs for pupils.

Dr. Hayes, in a paper at this convention, will explain very well the various testing devices now available with visually handicapped pupils. Individual and group tests of intelligence are available. Standardized tests of mechanical ability are being perfected. The Kinder and Anton interest inventories are useful guidance devices. The Scholastic Aptitude Test of the College Entrance Examination Board, available in Braille and on the Talking Book, is helpful in guiding pupils who are interested in higher education. This test, given to some members of the junior class at Perkins for the past two years, has been helpful. The Stanford Achievement Tests for the junior high years, the Jones-Harry and the Meyers-Ruch High School Progress Tests are good standardized measures of achievement. Then, too, some schools have used for many years, or are in the process of developing, their own diagnostic tests in certain subjects. Such tests are helpful in prognosticating success or failure in certain fields. In short, all measures of ability, interest, or achievement which can be used should help the student to know himself better and aid the schedule maker in planning the best possible program for the pupil.

When the schedule maker has marshalled his facts and understands his pupil well, he should plan for the individual conference with the student. This conference should seek to give the pupil a clear understanding of objectives, at least tentative ones, which are realistic because they take into account as many factors as are known at the time. A carefully worked out plan should be started early in junior high school, and certainly not later than the freshman year in high school, by which the pupil will reach his objective. It should be clearly understood by the pupil that this plan is tentative and is subject to revision

depending upon the maintenance or changing of the factors present when the original plan was made. Changing conditions beyond the school, different home conditions, employment possibilities, the addition and development of new areas of instruction can modify plans. Plans can also be changed by the pupil, himself, as he develops and matures or fails to approach the successful accomplishment demanded by his objective. Although interests are very important in determining objectives, they should not be the only consideration involved. A direct help in developing this long-range program would be a plan card or sheet of paper. On this could be recorded the objectives and the subjects to be taken by which the pupil could reach these objectives. In addition, as mentioned previously, notes on each conference relating to this particular problem would be helpful if recorded on the same card. Such a card would give continuity to the plan, and each pupil would derive confidence and a certain stability and appreciation for the difficulties involved in reaching his objective if he sets an objective plan. The clerical work in keeping such a plan need not be too time consuming, and the results will pay good dividends.

Certainly we recognize the further responsibility of the schedule maker to make possible within his plan for the realization of correlation and integration of subject material. The schedule must also provide adequately for the efficient development of a sound medical program. All of this involves a heavy responsibility, and in achieving a carefully worked out schedule, the principal must satisfy many needs. If, however, the schedule fails to meet the individual needs of a great majority of the pupils, then the schedule maker has failed in his job. We are certain that the only way to achieve the best possible schedule is for the planning to be done by the person who knows thoroughly and who recognizes the direct relationship between guidance and proper scheduling. In schools for the blind, the scheduling job must necessarily be a complex one as it must be done individually rather than by groups.

SENIOR HIGH SCHOOL
Tuesday, June 25

Chairman for next convention:
Mr. Joseph J. Kerr, Principal Teacher, Overbrook.

Secretary:
Mr. H. J. Higgins, Oklahoma.

REPORT OF SECTIONAL MEETING ON SCHOOL MANAGEMENT

TUESDAY AFTERNOON, 2:30-4:30

J. STEPHENSON HEMPHILL, Chairman
Perkins Institution and Massachusetts School for the Blind

THEODORE BARRY, Speaker
Business Manager, Phillips Exeter Academy

The meeting was called to order by Mr. Hemphill. The first bit of business was to elect Dr. Neal Quimby of New Mexico, Chairman, and Dr. A. L. Brown of Colorado, Secretary for the 1948 meeting of this group. The chairman then introduced Mr. Theodore Barry, Business Manager of Phillips Exeter Academy, as our speaker.

Mr. Barry spoke of the increase of commodity prices which were up at least 50%, farm prices more and labor greatly increased all of which has put a tremendous financial burden on schools. Since schools are in the business of education, they have no way of increasing their income except from gifts or a demand for higher tuition. Labor has made a demand for more and more money but has not produced more and in some cases less.

The increased cost of living can be somewhat controlled by buyers' resistance. People are fed up with exorbitant prices. A student lamp which a few years ago sold for eighty-nine cents now costs $4.98.

The cheapest way to do repairing is to do a thoroughly good job in the beginning. Don't do patchy work; do necessary repairs in large hunks. One saves money in the end.

The chances of obtaining surplus goods seemed most remote until Congress made some change in the manner in which this property is handled. Schools should have an opportunity to receive their share of such material.

The problem of keeping employees happy is important. Try to give salary increases before one asks for them. A certain amount of time should be given off for sickness. A pension system is absolutely necessary.

If schools are going to expand, there seems to be no immediate outlook that costs will decrease and every indication that they will increase. This may vary as to location but the speaker felt if one had to build there was little sense in waiting for cheaper prices. It did not seem, however, to be the time to be buying furniture.

All present enjoyed Mr. Barry's remarks and voted to hold a similar meeting in 1948. A lively discussion followed on problems pertinent to our schools, all of which was most helpful.

Francis M. Andrews, Secretary

WHAT SCHOOLS CAN DO

DR. DONALD D. DURRELL
Dean, School of Education, Boston University

It is hoped that the report of Dr. Durrell's speech given below does it justice, but to have fully comprehended and enjoyed it one had to be present. Dr. Durrell's talk was full of comments that gave this serious subject a lift, which made his audience enjoy themselves as well as evaluate their own teaching. He began by saying: "I am not experienced in giving omniscient lectures on general educational topics. I'm still doing honest work in education in addition to being an administrator, so it is usually unnecessary for me to stray outside my comfortable field of mechanics of reading and language arts."

One is first apt to think of what subjects schools teach: Reading, writing, arithmetic, spelling, history, geography, art, music, health, English, French, Latin, mathematics, science, commercial education, home economics, etc. But if one does this, someone immediately cries out: "But we don't teach subjects, we teach children." Add to this remark the gem of confused thinking: "We teach the whole child."

Educational objectives have been raised or at least we have appeared to make progress in education by changing our vocabulary and keeping our practices constant. For instance, we say, no recitations—we share experiences; no tests and measurements or examinations—we call it evaluation; no assignments—we have pupil plans. We continue to give our students grades on their report cards but can we predict how valuable a citizen the child will become from these scores and grades which we give out?

"Let us see what the school can do for the child in terms of later use—in terms of his strength as a citizen in a cooperative world. The fact that we are living in a republic makes a difference to our education—or it makes possible free education."

The schools should provide a variety of tastes and interests for our children. There is the matter of leisure time. Give ample opportunity for music, fine arts, crafts, sports, reading as enrichment of living, vocational interests. Expand all of these as much as possible, don't allow any of them to fall into ruts.

Next, the school should provide a standard of good craftsmanship. Take pleasure in doing things well, see the aesthetic side to the work, know it is there and be proud of what you are doing. Standards of workmanship are important. These include care of tools, cleaning up after the work is completed, order and system in all one does. Take a keen interest in what you are doing and have a desire to improve over the previous job. This can only be done by craftsmanship.

Another important problem of our schools is to teach social sensitivity and social competence. One should learn to fight against special privilege such as: "I'm on the inside, I know a politician; or you have the special privilege of the gang; or reward for your friends; special privilege for labor or for management." All these are a menace to society which our pupils must learn to combat. They must learn how to judge and they must become aware of propaganda, choosing what is right and discarding the bad.

We must show our students they are just at the beginning of society; that there is much to be done and that pioneering is ever present, not past. Most of our medical ills are unsolved, the greater scientific discoveries are yet ahead. This is true for our economic system, our social advancement, our emotional needs. Surely much more can be done in education and our religious advancement has left much to be desired. We are still pioneers and a world lies before our students to be discovered and conquered.

We must teach skills in practical arts. Our boys and girls need consumer education such as how to buy furniture, clothes,

etc. They should learn how to do the common every day tasks and repairs around the home. They should be taught how to save money, to buy insurance, to plan for their future. They must learn how to turn leisure time into worth while delights, which won't cost too much. Certainly the problems of raising a family should be recognized.

There must be adequate provision made to teach the skills in language and mental processes. To learn to write a truly good letter is an art. Our boys and girls must learn to organize their ideas. They must learn to keep to the point when talking, to speak well and to listen well. It is necessary to find ideas, to read attentively, to enlarge one's vocabulary and to improve one's ability to recall. To be able to select fact from opinion, to keep emotion out of arguments and to write legibly and spell accurately are abilities well worth cultivating.

Dr. Durrell would have schools provide at least six things:

1. Give the pupils a variety of tastes and interests.
2. Provide a standard of good craftsmanship.
3. Give these boys and girls social sensitivity and social competence.
4. Recognize we are at the beginning of society—not at the end.
5. Teach skills in practical arts.
6. Teach skills in language and mental processes.

THE IMPORTANCE OF SPECIAL EDUCATION FOR NEGRO TEACHERS

MRS. I. M. THEUS
Principal, Louisiana State School for Negro Blind

Before beginning the discussion of "The Importance of Special Education for Negro Teachers," may I digress in order to recall some facts concerning the general education of Negroes in the South? The recognition of this group as an integral part of American citizenry was not given until after the Civil war. This fact shows the newness of education for Negroes of the South. The background of public opinion has profoundly influenced the training of the Negro in that it has caused an educational lag.

Three factors are mainly responsible for this condition. In the first place, three centuries of slavery gave a sense of inferiority to the Negroes, and a feeling of superiority to the whites of the South; secondly, the over-hasty legislation of the reconstruction period proved the political incompetence of the Negro; and thirdly, the fear of domination of Negroes over whites of the South has served to impede the educational progress of the Negro.

Statistics show that as late as 1915, only 58% of the Negro children from 6 to 14 years in 17 southern states were enrolled in schools. Progress was much more rapid after that time, however, shown by the fact that statistics of the same 17 states mark an increase to 84% enrollment in 1930. The number of children who remained in school beyond the fourth grade increased from 18% in 1921 to 30% in 1930, and the number of public high schools was also greatly augmented.

Today educational opportunities are given to all Negroes of the South. In the space of time given, no race has made as rapid educational progress as the Negro; shown by the fact that members of the race have made outstanding contributions to American art, science and literature.

Education of the handicapped child is relatively recent. Formerly, such children were wholly neglected and forced to subsist on charity. This was especially true of the blind. Through the extensive work

of a few interested people, schools for the blind were first established in Europe and then in America. Likewise schools for the deaf were organized. Gradually the need for special schools for other types of handicapped children was realized, and accordingly such schools were founded. As a consequence, today quite a number of exceptional children enjoy the privilege of attending these special schools and benefiting therefrom.

Much more recent was the realization of the need of fitting teachers to work in schools for the handicapped. That this need was paramount came to be realized, however, and training schools for teachers of handicapped children were established in various parts of the United States.

There is only one such school in the South, and because of segregation in education, Negroes cannot attend this school. Also because of the low salaries paid to Negro teachers in the South, they for the most part, are unable to attend the northern schools where training for teachers of handicapped children is offered. Consequently, practically none of the schools for Negro handicapped children until recently had teachers who had been trained in their specific line of work.

This made it impossible for teachers to do their best. They had to gain their knowledge of the work through practical experience; hence many mistakes were made before, through the trial and error method, a workable program could be formulated.

In 1939, Dr. P. C. Potts surveyed some of the Negro schools for the deaf and blind, and through his findings, became cognizant of the great need for training of Negro teachers of handicapped children. He knew, from a study of salaries paid in various schools, that it was impossible for most teachers to attend schools offering special training. He therefore conceived the idea of establishing a school near enough so that Negro teachers could attend, and inexpensive enough to cope with their meager salaries. Through his influence and that of other interested persons, a training school for Negroes was established at West Virginia State College, Institute, West Virginia. Courses in Special Education for the deaf and blind were offered. Teachers from several states of the deep south, and also from the District of Columbia attended this school. Courses in observation and practice teaching were given in which teachers had the opportunity of putting into practice the knowledge gained from courses taken.

Upon completion of sixteen hours work in Special Education, a professional certificate was awarded. The first class to receive this type of certificate was that of 1940.

To further this project and to make it possible for many to attend, who would otherwise have been unable to do so, the American Foundation for the Blind gave scholarships to several students wishing to pursue Special Education courses.

Because West Virginia State College granted only a Bachelor's degree, and because many of the teachers were seeking a Master's degree, the training school was moved in 1942, to Hampton Institute, Hampton, Virginia.

This project has now been carried on for seven years, during which time, according to Dr. Potts, Director of Special Education courses at Hampton Institute, seventy-five students from eighteen different states and from the District of Columbia have been enrolled in these special courses. The entire faculty of two schools, and many teachers from several others have obtained certificates. Up to the present, twenty-five students have earned special certificates and six have received Master's degrees.

To Negro teachers of handicapped children in the South, the establishment of the training school at Hampton has been a God-send, because it gives these teachers the opportunity of taking courses which will enable them to really meet the needs of the particular group with which they deal. It enlightens them as to how to cope with specific problems which arise in schools for handicapped children. To be able to adjust such difficulties scientifically, makes for better schools, and gives to society a group which can take its place with the other members with greater as-

surance and a higher measure of success.

The specially trained teacher is better able to understand the handicapped child, and therefore can be more successful in aiding him to become adjusted socially, mentally and physically.

Special courses help bring various problems to the teacher's attention, and suggest ways and means of solving them. The adjustment problem is one that is particularly prominent with handicapped children. Many children, on entering school, have serious adjustment problems. Some of them have never played with other children, and therefore find it hard to fit into school life; others have been humored at home, and consequently feel that they should continue to have their way in school. It is the teacher's task to bring about these adjustments without letting the pupil know that they are being made. This may be done by introducing games through which principles of unselfishness, good sportsmanship and fair play are taught. Thus the social adjustment of the student may be aided. Another method of social adjustment is to establish contacts between handicapped children and normal children. We have used this method a great deal in our school, and find it quite helpful. Through interchange of programs, contests, educational tours and social functions, such as parties and dances our children have become more at ease and less aware of their handicap when in the presence of normal children. Where formerly they dreaded being with other children, they now anticipate such entertainments and contests with pleasure.

The beginning of a child's school life marks the beginning of the broadening of his mental scope. His school environment should so arouse his interest that a desire to learn new things will become part of him. Special courses present ways of bringing about this conclusion. Through such courses, the teachers learn where to obtain the proper kinds of tests, and when and how to administer them, thus letting the teacher know on what grade level to place each group of children, and enabling her to determine whether or not the child has a mental handicap.

Physical adjustment, which is always difficult for the blind child, may be aided through physical education. Special courses emphasize the value of having a well-equipped gymnasium in which the child may be taught to use the various kinds of apparatus effectively, and through games and other forms of exercise develop into a physically fit member of society. Physical adjustment helps in rounding out the child's life, and in causing him to become a well-poised individual. Though we do not have a gymnasium at our school, through Special Education courses we have learned of many ways to use the limited space and equipment we do have.

Courses in Special Education create in teachers a more professional attitude toward their field of work because they give valuable information as to where various materials, literature and kinds of equipment may be secured. A well-prepared teacher should have such information at her finger tips, and lack of this knowledge hitherto has constituted one of the Negro teacher's chief difficulties. Through these courses the teacher is able to keep abreast with the latest trends in the handicapped world which makes it possible for new ideas to be introduced into the work.

Teacher-training schools bring out the necessity of altering the curriculum in order to keep abreast with the latest trends and to meet the changing needs of the child. One of the courses which helped the teachers of our faculty most was that in curriculum building in which the curricula of various schools were studied and compared. Ideas in regard to preparing new curricula were also exchanged. From knowledge gained through this course we are making plans to revise our curriculum so as to develop well-rounded students.

The importance of special training for Negro teachers can readily be realized when the shortage of teachers prepared in work with the handicapped is taken into consideration. Hitherto, new teachers coming into this field have had to acquire their training through the aid of other teachers on the faculty and the superintendent; consequently both the teacher and her pupils were handicapped. With

the establishment of the training school at Hampton, this condition has been alleviated. The fact that courses at Hampton are not so expensive, and that Hampton is not so far away from most of the schools in which Negro teachers are employed, offers an inducement for those who are already in the work to attend school and for new teachers to enter the handicapped field.

Nothing keeps a school alive so much as wide-awake teachers. Special Education courses do a great deal toward promoting an active faculty in that the latest methods and ideas studied in the training school may be put into operation.

Special training helps teachers to secure better positions. Referring to an article by Dr. Potts in the "Outlook for the Blind and the Teachers Forum" for December, 1945, we find that a student after having taken courses at Hampton Institute, was successful in securing a position as an instructor in a southern college. This student had formerly been working in a broom shop. Another, who had been a W.P.A. worker, obtained a teaching position in a state school; and through civil service examinations, two students have secured positions working with handicapped children in public schools. These results are a direct consequence of courses in Special Education for Negro teachers.

Special preparation also makes it possible for teachers to demand higher salaries.

Superintendents whose teachers have attended the training school at Hampton are cognizant of the good that the school has already done. They state that after having received special training, their teachers show a more comprehensive approach to the subject matter, use improved methods, and have a sounder philosophy of education and a more hopeful outlook. Pupils who come under the supervision of specially trained teachers show greater achievement.

As a direct outgrowth of the establishment of the training school at Hampton has come the organization of the National Society of Special Education. The first biennial convention of this society was held at Hampton Institute in July, 1945. Eight states and the District of Columbia were represented. Through this society it is hoped that greater interest will be stimulated, and better professional status for Negro teachers of the handicapped will be promoted.

Because courses in Special Education enable Negro teachers to meet the needs of the particular group with which they deal, to better understand the handicapped child and aid his social, mental and physical adjustment, and to keep the school alive; and because such courses serve to give teachers a more professional attitude toward their work, to enable them to secure better positions and receive higher salaries, we sincerely urge the superintendents of schools in which Negro teachers are employed to make it possible for these teachers to procure special training for teaching the handicapped.

LET'S BE ICONOCLASTS

E. EVANS
Perkins Institution and Massachusetts School for the Blind

Investigations of the arithmetic retained by high school pupils tend to reveal that a large percentage of pupils are not in possession of a working knowledge of arithmetical processes and their applications. The conclusions are that arithmetic in the grades is made too much of an academic subject and confined too closely within the pages of the textbook. This conclusion is especially pertinent for our work, since arithmetic, rightly approached, can in many ways open doors to reality for blind children.

What textbook material may we omit in order to give more attention to experimental and experiential types of work? When

we leaf through the pages of any series of arithmetic texts we realize that the computation requirements are greater than blind pupils have time to fulfil.

It is in order then to:

1. Omit long computations in the four fundamental processes, except for a few worked in class. Bring pupils to a state of security and accuracy in the lightened computation load.

2. Omit most of the written types of fraction work. Since these are so varied in form and those in multiplication and division so seldom applied, pupils who manipulate them successfully as they are presented, one at a time, by the text, are not able, later on, to select one of these forms and apply it, as a working device, to a situation. Our pupils who have a good basic knowledge of the meaning of fractions will work objectively, thinking of the values involved and not relying on a written form.

3. Avoid long decimal computations except in those few cases where a problem may have such an appeal that it is desirable to secure a result giving high precision. In such cases, the computation involved can be a classroom task.

4. Omit the collections of mixed problems, which often have more of the aspects of a test for paragraph meaning. Besides the reading-for-meaning hazard these problems often introduce such difficult computation work that the pupil is caught between two perplexities.

Having performed the above eliminations, what shall we substitute? An article in a recent yearbook of the National Council of Teachers of Mathematics has for its theme the desirability of placing in the hands of the pupils the devices and objects which are concerned with ideas of number and measure. If this is true for pupils who are able to make visual interpretations, how much greater the necessity for this handling of forms, measures of all types, scale models, tangible diagrammatic material by pupils within our schools. The work in informal geometry which is now being introduced into arithmetic texts is in the nature of an asset. (I remember the pleased surprise of a boy who found that the two diagonals of a square divide into quarters as truly as do parallel or right-angle lines.)

We shall look to our environment and find the grocery, electric light, and gas bills; the bank book, the money order, the insurance of weekly-payment type which is frequently carried for our pupils by their parents. We shall find distances, heights, and areas to measure. We shall consider cost of living, ceiling prices, legislation for relief and unemployment. We shall read financial reports of our own school and of the community. In the latter the pupils learn that the annual appropriation for the public school is the largest item in the budget. From press and radio we shall select some of the many references to the vital ways in which numbers play a part, ranging from election returns and baseball statistics to the caloric level of nutrition in UNRRA's reports. Some of these items will furnish occasions for exact computation, many for approximate computation.

Through the application of number processes and interpretations to the diversified situations in the environment which involve numbers, it is to be expected that our pupils will come to the point of view that the exercises in the textbook are not a goal but a taking-off point.

DISCUSSION

(Dr. E. E. Allen's Digest of His Remarks)

At first the tangible type-slate appealed to me as a useful, perhaps invaluable device enabling the blind pupil to work his arithmetic examples, alike in class and at home, as the seeing do. But on later noticing that my best mathematics instructors, after utilizing the slate to show form and procedure, depend wholly on mental arithmetic (though allowing use of the Braille-writer to record the equations of algebra), I have assumed independence of mechanical aids to be highly desirable, especially for people who cannot well carry slates along through life as we do pencil and paper.

Many an educator believes that, by avoidance of mental arithmetic practice at school, pupils lose in potential thinking power; also that elementary children, through dependence upon the textbook for knowledge of anything, lose the clarification of the subject which the teacher might give them orally.

Here is an illustration of how important some people fancy following common ways are, even for exceptional pupils: On my asking a certain sight-saving class teacher if she ever made use of mental arithmetic —"Never," she replied, "I should prefer that method, but the principal of this public school requires that all coming under our roof shall teach and learn the same written way."

Now what is one person's good may be another's poison—A boy accidentally blinded at 14 years, on coming to us at South Boston, had resolved to let his loss make no difference. But finding our type-slate a slow, clumsy thing, and very blind, he immediately substituted doing examples in his head and, after a few days, was top scholar in arithmetic; presently also in algebra. Similarly in all his studies, using ears instead of fingers, he managed so well without Braille (which he was told might take him a month to read easily), that on becoming disgusted with our school's means and methods in general, he quit Perkins for his home high school, there also leapfrogging over his mates. Next, in 3½ years, he graduated from a 4-year college course valedictorian of his class; and, would you believe it? he had partly met expenses there through tutoring seeing students in how to study effectively. This young man studied law according to the case method, which means a prodigious memory for details, and has become a successful attorney, having been sent to the State Legislature. He is now a town selectman.

While one swallow does not make a summer, this pupil showed us that there is more than one narrow road to success at school; also that our conventional way, via the finger, is not always the better one.

While blindness narrows, it deepens. In general, if any benefit whatever, may be wrung from blindness, its victim should be encouraged to make the most of it. Therefore, teach him early how to use his mind to greatest advantage; and so develop its powers. Bid him listen intensively to oral information; also habitually concentrate on what he reads—learn how to train his memory, avoid following the path of least resistance and in time become strong where the seeing are commonly weak.

THE BRAILLE SLIDE RULE

A Teachers' and Students' Guide to the Use of the Braille Slide Rule

RICHARD L. MONTGOMERY

The problem concerned itself with the production of a manual for both the teacher of the blind and the blind student to use in connection with the Braille slide rule.

The specific problems were:

1. A review of the early development of the logarithmic slide rule and a review of the early development of the Braille system for reading by the blind to the end that a slide rule employing the Braille system might be devised and constructed.

2. A consideration of the topics of mathematics to be selected in order to give instruction in the use of the Braille slide rule.

3. The selection of appropriate topics to the end that a blind student in mathematics may acquire the necessary skills to compute upon the Braille slide rule.

Chapters I and II reflect in a chronological and parallel way the early beginnings of the logarithmic slide rule and the Braille reading system for the blind. These two separate streams of social inheritance, running through centuries of work, the rule and Braille, are joined together in the newly invented educational tool: the Braille slide rule for the sightless. This instrument, which offers to the blind an opportunity for the development of skills far greater than present methods of arithmetical computations, is but one aspect of Napier's logarithmic system and the Braille system of reading for the sightless.

The contributions of the work of many scientists were included in the manual and each is in some way related to the present instrument. Among those mentioned are Rudolff, Stevin, Napier, Briggs, Burgi, Oughtred, Gunter, Wingate, Forster, Hartwell, Bieraker, Coggeshall, Newton, Warner, Everard, Nicholson, Roget, Mannheim, Thacher, Cox, Cajori, and Shuster. Those in the field of the embossed reading for the sightless were Diderot, Hauy, Villey, Saunderson, Barbier, Braille, Moon, Armitage, Pollak, Russ, Waite, Smith, Hall, Latimer, Irwin, and Allen.

The manual tells the story of the early experiments, twenty years ago, with logarithms and embossed characters. The first picture, with three plan views, of the Braille slide rule is included. Also included are the reproductions of Saunderson's first slate, Barbier's and Braille's cells, Moon type, New York Point, American Braille, and the Standard Braille.

Chapters III and IV concern themselves with imparting of vital and instructive knowledge to the teacher of the blind and to the blind student as well. To read, to manipulate, and to care for the instrument were the goals set as objectives. With these, illustrations of the scales, examples for reading primary, secondary, and tertiary figures are abundantly supplied.

Through a survey of modern textbooks on arithmetic for the junior- and senior-high-school grades, the following topics and operations were included for practice by the blind student:

Multiplication
Division
Combined Multiplication and Division
Figuring Costs
Ratio
Proportion
Conversion Ratios
Squares and Root
Cubes and Root
The 2/3 and 3/.2 Powers
The 4th Power and Root
Reciprocals
Percentages
Variations
Equivalents
Simple and Compound Interests
Circumference and Diameter of Circles

Following each topic above, there is a series of problems which are designed for the student so that he may acquire a

working knowledge of problems in that particular branch of arithmetic. These problems were selected, grouped, and graduated on a scale from the simple to the complex. Keeping within this pattern for each topic, the ability to read figures was definitely arranged. Thus, in a dual way, these exercises were set up for the blind student through all the above-mentioned topics. The sample problems, preceding the list of exercises, are set forth and sketched in a simple way to show solutions directly upon the face of the Braille slide rule. In all, there are sixty-six diagrams for the beginner to guide him into these topics and there are nearly five hundred problems, excluding the many sample problems, to guide him through these topics. This abundance of work was intended for the teacher for her classroom work as well as for homework practice. The sufficient number of exercises, prepared in order of difficulty, offers both initial teaching and remedial work in the Braille slide rule. It also provides a method of learning, above and beyond that of random trial-and-error activities, which results in saving the psychophysical energies of both the teacher and student. A plan for a smooth transition from one topic or unit of work to another was kept in mind as was a design to maintain a simple presentation for the blind student in secondary education.

The chief means of showing how this was done is shown by the following diagram of multiplication.

X	C	Left Index I	The Other Factor
	D	One Factor	The Answer

X indicates that it is a problem in multiplication

C and D are scales used in the computation

Index I of C scale over one factor on the D scale and under the other factor the answer is found.

Supplying figures for the words factor and answer in the above diagram, the problem $17 \times 45 = 765$ is illustrated below:

X	C	1	45
	D	17	765

With each topic, the manual gives a model problem for solution in that particular branch of mathematics. The determination of the decimal point, one of the greatest stumbling factors to the widespread use of the slide rule, is clearly illustrated with each model problem given for solution. The rules, for determination of the decimal point position in the answers of solutions, are easily understood and are sound, for of the latter, the rules have no modifications nor exceptions.

The two methods used to determine the location of the decimal point in Braille slide rule computations are carefully explained with each chapter. It is recommended, first, that a mental estimate be made for all computations regarding the location of the decimal point and, second, that the rules set forth in each topic be followed for the location of the decimal point. Of the latter, an illustration will clearly show the techniques used, which is a departure from the paper and pencil or the present slate method.

Left Index. When the left index is used, or the slide projects to the right in multiplication, the product will have as many places as the sum of the digits in the multiplier and the multiplicand, minus one.

$17 \times 45 = 765$, 17 has 2 digits, 45 has 2 digits. $2 + 2 = 4$. Since the left index is used, or the slide goes to the right, 1 is taken from the total number of digits of 4. $4 - 1 = 3$. There are 3 digits in the product. The steps are, briefly, the sum, to the right, minus one. Note the illustration below:

X	C	1	45
	D	17	765

Right Index. When the right index is used, or the slide projects to the left, the product will have as many places as the sum of the digits of the multiplier and the multiplicand.

$60 \times 42 = 2520$, 60 has 2 digits, 42 has 2 digits. $2 + 2 = 4$. Since the right index

is used, or the slide goes to the left, the product will have 4 digits for an answer. The steps are, to the left, the sum. Note the illustration below:

X	C	42	1
	D	2520	60

When the digits are counted to the right of the decimal point, only the zeros between the decimal and the first significant figure are counted. Each zero is counted as minus one. 0.081 has one zero between the decimal point and 8. Therefore, one digit is taken negatively, minus one digit.

2410	has	4 digits
842	has	3 digits
23	has	2 digits
6.5	has	1 digit
0.54	has	0 digits
0.0075	has	—2 digits
0.00045	has	—3 digits

$21 \times 0.7 = 14.7$. 21 has 2 digits. 0.7 has 0 digits, $2 + 0 = 2$. Since the slide projects to the left, there are 2 digits in the product or answer. Note the illustration below:

X	C	7	1
	D	147	21

$15 \times 0.05 = 0.75$, 15 has 2 digits, 0.05 has —1 digit. $2 + (-1) = 1$. Since the slide projects to the right, one is subtracted from the sum of the digits. $1 - 1 = 0$. The answer has 0 digits. There are no zeros between the decimal point and the first significant figure; therefore, the decimal point is placed in front of the first figure.

The chief sources of information were found in:

1. Books and pamphlets concerning the logarithmic scales and its history. Of these, Cajori's works are still unsurpassed. Shuster's recent thesis is particularly helpful. Books concerning the field of handicapped include those of Illingworth and Rodenberg for the historical portion; Merry, Hayes, and others emphasized the recent trends in mathematics for the blind.

2. Visits to fourteen of the State schools for the blind and correspondence with twenty-three others.

3. Visits to commercial concerns that manufacture slide rules and allied precision instruments.

4. Visits to several libraries and printing establishments which have special branches and sections dealing with the specific activities of the sightless.

The bibliography consists of two portions: first, the logarithmic scale, the slide rule, its history and general sources; and second, the current Braille literature for the sightless.

THE INSTRUCTION OF THE BLIND IN ADVANCED MATHEMATICS

FREDERIC T. NEUMANN
Michigan School for the Blind

Whatever type of academic instruction the blind student is to receive, it must be based on the active recognition of three principles. Briefly, it must first maximize his abilities and minimize his handicaps; secondly, achieve for him intellectual parity with the seeing student of similar intelligence; and thirdly, be useful to him in contributing to the integration of his personality and to the mutual adjustment between him and his environment. Whether or not the teaching of advanced mathematics to the blind on the secondary level can accomplish these goals depends primarily upon the teacher's understanding of his student and of his subject, and upon his ingenuity in bringing both his student and his subject into a working

whole without violatng either the personality of the one or the philosophy of the other.

Definition of Advanced Mathematics: For the purpose of this paper, the term "advanced mathematics" is to mean principally algebra and geometry as they are taught in their various phases in the secondary schools of America. Actually, personal experience has impressed upon me the fact that the suggestions herein set forth are equally helpful in the "higher mathematics" of college. Yet, in behalf of broader application and more concrete specificity, it seems fitting to restrict this paper to the more limited definition of advanced mathematics.

Why the Blind Study Advanced Mathematics: Before exposing any student to the study of any intellectual discipline, we must know why that particular student should study that particular subject. This is especially true for the handicapped child who, because his opportunities are limited, can afford to waste little time in matters which do not contribute either directly to the realization of his opportunities or, indirectly, to the extension of those opportunities. But in order to know why a particular student should study a particular subject, we must first understand the potentially operative reciprocity or functional rapport between the student and the subject—that is, on the one hand, what the student needs as related to what the subject offers and, on the other hand, what abilities and skills the student has or can develop as related to what abilities and skills the subject requires. All too often, we hear such confused statements as these: "Of course I have studied algebra, but I have never used it. A scrap of paper, a stub of a pencil, and good old arithmetic solve all of my mathematical problems. Moreover, since I with my good vision have no use for algebra, why in the world should we expect the blind ever to have any use for it! And as for geometry with its figures and relationships which we can easily see on all sides of us if we just looked, what more impractical and difficult subject can there be for the blind who, because they don't see, obviously don't have very much use for geometrical drawing!" So runs the thesis of those who have little critical appreciation either of advanced mathematics or of the blind. They fail to see that although the mathematical problems of everyday living can usually be solved in one way or another by arithmetical methods, these same problems can be solved more easily, more quickly, more directly, and therefore more efficiently by the special processes of advanced mathematics. Similarly, with respect to the blind person, they do not realize that it is especially he who, because most of his problem-solving is done in his head and without the aid of a scrap of paper and the stub of a pencil, has urgent need for the shortest, the quickest and the most direct methods of solution. Finally, they seem not to recognize that, because the blind child cannot readily observe in their wholeness the line and space relationships in the geometry of nature about him, he more than the seeing child needs the experiences provided by geometry. He needs these experiences not only because they can be of practical value to him in the construction of design and the interpretation of pattern in industrial arts and in home economics, but even more because they cultivate in him those line and space concepts so indispensable to his personal orientation in any physical environment, to his understanding and following (or giving) directions in traveling, and to his appreciation of location and landscape in their proper part-whole relationships. Here then, we have an indication of the kind of evidence that explains why the blind study advanced mathematics. In our capacity as the mathematics teachers of the blind, it is our constant responsibility to contribute to the increase of this evidence so that our students, through meaningful instruction, will have every opportunity possible to grow into resourceful and efficient adults.

Knowing More Than Fundamentals: At the very outset, there is that all too tempting approach that every teacher of the blind must guard against. It is the superficially realistic but, nevertheless, basically defeatist attitude that, because the blind

child is physically handicapped, his intellectual horizon is similarly limited. According to this assumption, the blind child undertakes academic studies (and especially advanced mathematics) almost exclusively for reasons of cultural appreciation, and this cultural appreciation is weighted and justified primarily on the side of receptivity rather than in the interest of productivity. Consequently, if the student understands the bare fundamentals as illustrated and applied in simple exercises, he is considered to have an acquaintance with the subject matter sufficient to make him appreciative of its "deeper cultural values." No further application is intended—because of presumed impracticability; no further investigation is attempted—because of presumed impossibility. From this attitude of inferiority, it is but a short and inevitable step to a philosophy of defeatism and a psychology of frustration. Thus in the academic instruction of the blind, especially in advanced mathematics, the procedure has often tended to take this course: (1) The teaching of bare fundamentals; (2) the application of fundamentals in simple unrealistic exercises; (3) the realization that this superficial teaching and denatured application contribute little to the intellectual growth and personal integration of the blind student; (4) the conclusion that the subject matter is therefore of little value in the education of the blind; (5) the determination to drop the subject matter from the curriculum for the blind, or to give it no more than lip service in that curriculum. Here then, we have an illustration of the ways in which we may subtly maximize the handicaps and minimize the abilities of the blind, deprive them of intellectual parity and of equal educational and vocational opportunities with their seeing companions, and deny to them the riches of the well-rounded education of the whole child. Certainly, the teaching of the simplest fundamentals in any subject is essential; but it is not sufficient. If a subject is to be studied, it must be made meaningful to the child studying it, or not studied at all. Our task, therefore, is not to avoid difficulties by confining our study to fundamentals, but rather to meet and overcome difficulties through appropriate adaptations in the process of bringing out that meaningfulness which advanced mathematics can have for the blind.

Emphasis on Problem-Solving: In the teaching of advanced mathematics in the secondary school, there is the tendency to give too much time and attention to the development of technical proficiency in merely mechanical exercises and too little time and thought to the application of these mathematical techniques and tools in the solving of actual or verbal problems. The fact that a mathematical exercise is difficult because it involves a multi-degree polynomial in long division, or an extended series of polynomials in addition or multiplication, or an equation in which the coefficients are large and the terms (though similar) are scattered, may be proof of nothing more than an artificially complicated extension of an otherwise simple application of the fundamental processes. Actually, what is demanded in higher mathematics is the twofold ability of discrimination in analysis of problem situations and of differentiation in application of the fundamental processes to this analysis. These goals can never be achieved through merely mechanical exercises no matter how high the degree of technical proficiency. Thus, learning more than fundamentals means not artificially extending and complicating the mechanics of mathematics, but realistically developing the powers of analytical discrimination and of productive application in reasonably life-like situations. Since the blind person tends to and should do most of his calculating mentally, this emphasis on problem-solving (which stresses reasoning by way of analysis and application) rather than the emphasis on technical proficiency (which stresses the mechanics of extended written exercises), is especially suited to the blind: first, because it maximizes the blind student's ability in the thought process and minimizes his handicap in the writing process; secondly, because on the basis of reasoned analysis and application, rather than on the basis of written dexterity in mechanical techniques,

it gives him an opportunity for intellectual parity with his seeing companions of comparable intelligence; and thirdly, because it makes advanced mathematics a useful tool for him in the shortest and most efficient methods of solving his mathematical problems of everyday living. Emphasis on problem-solving is, therefore, not only the proper objective in all advanced mathematics, but also the objective which is best suited to the instruction of the blind.

Material Limitations: Blindness, we all agree, imposes certain limitations upon the learner. Yet, how often do we attempt to distinguish between the different aspects of these limitations as they are specifically related to the different subjects or disciplines of the curriculum? Doubtless, experience has taught us that reading problems and writing difficulties differ not only in degree, but in kind, between mathematical exercises and exercises in social studies, composition and literature. But still we continue to lump together with implied homogeneity the educational limitations of blindness, even though these general educational limitations are no more realistic than is the average man or the average family of three and seven-tenths members. What we must constantly strive toward, therefore, in our work with and our literature concerning the blind is differentiation rather than generalization, distinctions rather than contradictions. If we are discerning, we can easily understand that blindness is a handicap only as it handicaps a particular individual at a particular time in a particular situation. Likewise, the educational limitations imposed by blindness and the suggested adaptations for overcoming these limitations can be meaningful only when they are related to specific subject matter in a specific curriculum for a specific student. Thus, in the following brief paragraphs we shall consider from the point of view of advanced mathematics, first, the material limitations confronted by the blind in reading, in writing and in laboratory equipment and, secondly, a few adaptations that can be helpful in overcoming or in partially remedying these limitations.

Reading Limitations: The fact that the blind student usually reads much more slowly than does his seeing classmate is not the significant reading handicap in advanced mathematics. Whether it be the explanatory and illustrative materials in developmental lessons or the statements of verbal problems, the amount of reading to be done in advanced mathematics is customarily so small and so succinct that speed in reading is of much less consequence than is careful comprehension for analysis and application. On the other hand, in the technical processes used in the solution of verbal problems or merely in mechanical exercises, there is the almost constant necessity in mathematical operations to keep at least two quantities in view—as the multiplier and multiplicand, the two members of an equation, the two or more corresponding lines or angles or planes in geometrical figures, etc. But many blind people actually comprehend no more than one symbol at a time in Braille reading, for they either read with but one finger or, while apparently using two, have one act as simply a guide for the other. Thus, in trying to keep two quantities simultaneously in view, the one-finger blind reader must continually move his reading finger back and forth between the quantities or symbols and, in this way, both increases his probability of error in mere reading comprehension and decreases his potentiality of speed and accuracy in the subsequent mathematical operations. Herein lies the real reading limitation of the blind student in advanced mathematics —not in his slowness of comprehension, but in his tendency toward one-finger comprehension of but one symbol or one quantity at a time.

Two-Finger Reading: The obvious remedy for this condition is that the blind student learn to read with two fingers in advanced mathematics. The reading finger of each hand will be kept on its appropriate quantity or symbol (rather than moving back and forth between the quantities). In this manner, the probability of error that exists in comprehension when one finger hurriedly alternates between quantities is greatly decreased, while both

speed and accuracy in comprehension and calculation are similarly increased. The one drawback in this adaptation is, however, that by the time students reach advanced mathematics in high school, they find it difficult to develop sensitivity in and coordination between the reading fingers of each hand. The source of the solution for this problem may have to be sought in the earliest training that the blind child is given in elementary Braille reading.

Ten-Finger-Figure Comprehension: The question is often asked as to why many blind students find geometry so difficult. The answer may be put simply: In geometry we must see the relationships that exist between magnitudes within a figure or within corresponding figures. The eye in a glance can take in a simultaneous impression of these related magnitudes as they are interrelated in a whole. The finger at a touch can gain only a serial impression of these magnitudes as they are consecutively related to each other and not as they are concurrently interrelated in the wholeness of the figure. Thus at the very outset, the blind student finds difficulty in comprehending the basic conditions of the geometrical problem, much less the nature of its solution. To remedy this difficulty, the blind person must learn to look at a figure, not by tracing its outline with one finger, but by surveying its entire surface with all the fingers of both hands moving in a coordinated slightly rotary fashion from sides to center and across the figure until an impression of its wholeness is gained. After that, portions of the figure may be selected for special inspection by the two reading fingers in order to make clear more minute interrelationships; but these relationships must always be seen as composite parts of the greater whole. Only in this way can a geometrical problem be approached and efficiently solved. Here again, as in two-finger reading, the high-school student finds it difficult to develop the proper degree of sensitivity in and coordination between his fingers and hands. Actually, the problem of gaining realistic impressions through the fingers and hands is so significant in the living and growing of the blind person that, whether he ever or never studies advanced mathematics, he must learn and practice ten-finger-figure comprehension. Consequently, just as the blind child is taught to read Braille, so he must also be taught the proper way to feel solid and plane figures if he is to grow up with any reliable understanding of his physical environment. Likewise, those who work with the blind must also understand the method of ten-finger-figure comprehension if they are to convey to the blind child or blind adult intelligible sensations or impressions. In other words, in showing a blind person a figure or any other object, do not trace its outline with his finger—for he will see only a line which grows in length and complexity. Rather, have him inspect the entire figure as suggested, and then, and only then, point out the detail which you wish to call to his attention—and he will then understand that detail because it will be related to the whole figure. Thus with the aid of the techniques of two-finger reading and of ten-finger-figure comprehension, the reading limitation of the blind in the study of advanced mathematics is largely overcome.

Writing Limitation: Basically, the prob lem in writing for the blind student in ad vanced mathematics stems from the fac that mathematical notation demands flexibility whereas Braille notation is characterized by rigidity in both size and position of symbols. Whether Braille slates, writers or boards, or any of the various type slates are used, there is no simple yet efficient method for representing such essential symbols as sub-numbers, roots and exponents, without occupying at least one full additional space of the same size as and on the same level with coefficients, radicands and other basic terms—and often these supposedly simple sub-numbers, roots and exponents occupy as many as three or more additional spaces. Because of this uniformity of Braille notation and of the usual notations employed on type slates, the blind person is denied the pictorial assistance which the seeing student receives from the meaningfully varied symbolism of written mathematical

expressions. For this reason too, not only may the blind learner be confused in his thinking by such complicated symbolism, but even more the trained blind student does find this meaninglessly uniform symbolism a material hindrance to his accuracy and speed of calculation. Of the various writing instruments used by the blind, the Braille slate and stylus are the most unsatisfactory for mathematical exercises because of the constant need for turning the paper and other equally apparent difficulties. The type slates and cube boards are satisfactory for arithmetical exercises but unsatisfactory for exercise in advanced mathematics, since the type or cubes seldom realistically or otherwise properly represent the higher mathematical symbols. The Braille writer is the most satisfactory device for recording the solution of problems in advanced mathematics since it enables the student to "read back" and "work on" the material as it is written. Yet all these instruments are cumbersome, and even the improvements recommended for the cube do not remedy the essential defects found in the uniformity of Braille notation and in the rigidity of Braille writing and of writing on type slates and cube boards. Obviously therefore, since systems of notation and writing should help to clarify thinking and should contribute to the speed and accuracy of calculations—criteria which the systems of notation and writing used by the blind do not satisfy—we must frankly admit that the blind student in advanced mathematics should wherever possible substitute for written techniques purely mental mechanics.

Mental Mechanics: Although much space might be profitably devoted to the discussion and illustration of mental mechanics, the nature of this paper permits only a brief explanatory comment. At the outset, we must guard against the misconception that mental mathematics is nothing more than a mental reproduction of written mathematics. Actually, it differs from the written expression both in form and in process. In general, it is based upon three concepts: (1) key ideas, by which is meant those numbers, symbols or relationships that are the core of a problem or exercise and that must be kept constantly in mind at each step as guide posts toward the solution; (2) the assimilative-approximation technique, by which at each step in the mechanics of a problem or exercise the answer or a portion of the answer is approximated by a cross-section assimilation of all the terms of a similar degree that have appeared and may appear at any point in the exercise; (3) the cumulative technique, by which after each assimilation of similar terms the preceding assimilations are reviewed and combined in the gradual systematic building of the complete answer or solution. To illustrate this procedure properly would require a variety of examples for which there is no available space. Yet one brief illustration from algebra may be sufficiently instructive. In multiplying a trinomial by a trinomial, in each of which there are terms of the first, second and third degrees arranged in descending order, the product will contain terms of the second, third, fourth, fifth and sixth degrees. If the student were to attempt to work out this exercise mentally in the same form as it would appear in the written expression on paper (that is, with three separate partial products all terms of which would have to be kept in mind until they could be eventually combined in their proper columns for the complete product), there would be little hope of success in mental mathematics even for the competent student. Consequently, in mental mathematics we must turn to the assimilative-approximation and cumulative techniques—assuming of course that the key ideas to be kept in mind in this exercise are principally the coefficients since the degrees of the terms, because of the arrangement in descending order, may be easily placed in a similarly descending order from the sixth to the second degrees in the final report. To build this final product, the assimilative-approximation technique demands that we combine only and all those terms from the multiplier and multiplicand that will give, first, a sixth degree term, next a fifth degree term, then a fourth degree term, etc.; and the cumulative technique demands that after

each combination of similar partial products, we review or repeat to ourselves the previously derived portions of the complete product (emphasizing mainly the coefficients since the degrees of the terms take care of themselves in the descending arrangement) until the final answer is obtained. Complicated as this procedure may sound, it is relatively simple once the student learns concentration on key ideas and systematic inspection. As an introduction to this procedure, the student may be permitted and encouraged to write out the multiplicand and multiplier and also each completed term of the final product as it cumulates, in order that he may devote all of his attention at first to the mental operations involved in the assimilative-approximation technique. Later, as he masters this technique and develops his powers of concentration, the student may omit the writing of, first, the multiplier, then the multiplicand, and finally the cumulated portions of the answer, until all the operations become completely mental. Of course, mental mathematics may be applied even more easily in the solving of verbal problems. But whatever the type of problem or exercise in advanced mathematics, the blind person must learn and apply mental mechanics if the tools of mathematics are to become for him practical aids in everyday living.

Visualization: Of equal importance with mental mechanics in the solution of geometrical problems by the blind is visualization. Although it is true that the blind student can learn to draw geometrical figures skillfully and, by the technique of ten-finger-figure comprehension, can learn to read these figures intelligently, the student who can picture geometrical diagrams mentally without the aid of drawn representations is the one who can best understand the properties of and relationships between geometrical quantities. But simply to tell a child to visualize without providing a method by which this technique can be acquired (as is all too often done), is indeed meaningless. If this method is to be provided therefore, the following suggestive steps may be helpful. First, have the student draw a simple figure on paper and have him inspect it until he understands its properties. Next, on a similar sheet of paper have him draw a similar but imaginary figure with the tip of his finger. Then, remove the paper and have him draw the same imaginary figure on the surface of his desk—after, of course, removing all dust that might assist his imagination. Now, with only this imaginary figure before him, have him explain its properties—adjacent and opposite sides and angles and other relationships. Repeat these steps with different and more complex figures until the student can visualize them with the aid of only the imaginary representations outlined by his finger on his desk or any other available surface. Until the student becomes proficient in visualization, he must always begin his visualizing by sketching the imaginary diagram either on a real or on an imagined surface so that, by going through the motions of constructing a figure even though it is not actually drawn, he may be better able to picture it realistically in his mind. With this preparation, the blind student will eventually find it possible to visualize geometrical figures without the assistance of even the imaginary constructions. Certainly, so indispensable is this power of visualization for the blind person that any time or effort spent by him in its development is amply rewarded not only by his greater efficiency in the solution of geometrical problems, but also by his more intelligent appreciation of and orientation in his physical environment. Here then, we have two more adaptations—mental mechanics and visualization—by which advanced mathematics may be made especially meaningful for both the blind child and the blind adult

Limitation in Laboratory Equipment: Although much less important than the reading and writing limitations, the limitation in laboratory equipment in advanced mathematics must nevertheless be recognized. Briefly, it is this: On the one hand, the equipment is usually so expensive that the individual student and even many residential schools and day schools which blind students attend cannot afford it. On the other hand, much of the equipment

(such as the materials used in the plotting of graphs) is not of sufficiently fine construction to permit of accurate mathematical application. Concerning this latter difficulty, we must realize that, although the equipment cannot be used as technically reliable mathematical apparatus in the solution of problems, it does consist of tools that can be utilized as invaluable teaching devices. Thus even the materials for constructing graphs, mathematically inadequate as they are, can and must be profitably employed in the classroom to give the student a realistic understanding of the vast potentialities in their application. As for the financial problem, it may be partially solved by permitting the schools to devote the Federal aid under their quotas to the purchase of any and all educational materials for the blind, no matter what these materials are and no matter where they may be obtained provided, of course, they contribute to the improvement or the extension of needed instruction.

Continuing the Quest: Whether or not the adaptations set forth in this paper are accepted by teachers of the blind is of little importance. Actually, any value which this essay might have will become a liability if we do not realize that these adaptations are intended merely to suggest, rather than to exhaust, the possibilities in the never ending quest for more effective teaching methods and more useful teaching devices. The real question, therefore, concerns our ability and willingness as teachers to grow in terms of the present and future needs and potentialities of our blind students in particular, and not simply to succeed in terms of those past standards for all students in general. Once we understand our responsibility, we must search, experiment, test, evaluate, apply and search again; for through this constant seeking and finding, we approach professional maturity and our students approach productive happiness. Whether with profound ingenuity we develop a circular slide rule for the blind or with simple insight we discover the "f-o-i-l" method to be more useful than cross-multiplication for the blind, we all are making invaluable contributions to the growth of our students. May this growth be our first duty, our living ideal, our working program.

REPORT OF SECTIONAL MEETING, WEDNESDAY, JUNE 26

Mathematics

Officers elected:

Chairman—Miss Ethel Evans, Perkins, 1948.

Secretary—Mr. Robert H. Thompson, Missouri School, 1948.

Reading of Papers:

1. "Let's Be Iconoclasts," Miss Evans, Perkins.
2. Dr. Allen tells how he would like to teach Mathematics.
2. "The Slide Rule," Dr. Montgomery, Columbia.
3. Mr. Neumann was unable to be present due to attendance in summer school. His paper "Teaching of Advanced Mathematics" could not be read due to shortage of time. The group voted to request that the paper be printed.

Robert H. Thompson, Acting Secretary

ENRICHING AND EXTENDING THE SCIENCE PROGRAM TO MEET POST-WAR NEEDS

DONALD OVERBEAY
Principal, Kansas State School for the Blind

The most recent comprehensive study of curriculum for residential schools reveals a tragic lack of emphasis in the science program both in the grades and in the high school.[1] This study may have moved many administrators to remedy such an obvious deficiency by revising their curriculum to include more science. The emphasis upon science and the scientific implications during World War II may have stimulated curriculum revision which included a more extensive and enriched study of science. Even though these assumptions may be entirely correct, I'm sure that much must still be done if science is to hold its rightful place in our future curriculums. It is not within the scope of this paper to give a detailed report on what is being done or to make detailed suggestions as to what should be done to enrich and extend the science program; nevertheless, I hope to stimulate such thinking as will help make up for the sad lack of science education found today in our schools.

Why should we emphasize science? What are the principal objectives of science training? In what directions should it be extended? How should it be enriched?

"Democracy is always a difficult path to follow because its continued existence depends upon the solution by reason of highly complex social problems. Democracy can be effective only to the extent that intelligent, informed people carefully evaluate the motives for their actions and on the basis of impartial and unprejudiced investigation arrive at conclusions with a fair degree of like-mindedness. Since the nature of our participation in society is determined largely by belief and opinion, we are charged with the responsibility of subjecting our beliefs and opinions to the most searching inquiry to determine to what extent they are based upon verifiable evidence.

"The haphazard nature of the forces which shape our prejudices and beliefs is quite apparent if one examines the checkered background of antagonism, fear, hate, and tradition from which they spring. Beliefs, from whatever field of human endeavor, which will not stand free and fearless questioning are to be ruthlessly rejected no matter how sacred or honorable their source. Facts which stand the acid test of careful reasoning or the principles of scientific method are demonstrably sound, and their acceptance as common property will guide man to intelligent action, not degrade him to become the victim of irresponsible authority.

"The tremendous gap between a truly democratic society and present efforts toward social stability shows grievously the desperate need for a scientifically planned internationalism. The powerful methods of science used to control the physical world must be brought to bear upon the complex problems of human engineering.

"In spite of the far reaching changes natural science has brought about in our physical environment, much of its energy is ill-directed and wasted. Unfortunately our social conduct and ways of thinking are being adapted far too slowly to keep up with changes in our rapidly evolving technology.

"Industrial aspects of our culture have swiftly modified processes to meet new and changing demands, but problems in the field of human relations continue to be "solved" by prejudice, tradition or chance. Government, the family, the school and the church muddle along in a medium which renders much of their work ineffectual and frequently detrimental to the best interests of a dynamic society.

"It is inexcusable that in educating youth for participation in democracy we train them to follow directions rather than to evaluate for themselves their physical-

social environment in terms of meaningful experiences in science."[2]

What are the principal objectives of science training? "The principal objectives of science instruction are:

1. To advance the pupil in his use of the scientific method.
   a. To develop the habit of looking for natural causes of phenomena rather than to appeal to the occult and mysterious.
   b. Accuracy in observing, calculating and reporting.
   c. To suspend judgment; wait until all the facts are in before drawing a conclusion.
   d. Submerging personal bias and prejudice; intellectual honesty.
   e. Willingness to consider all sides of a question; an unwillingness to accept any answer as final.
   f. To criticize oneself and propose solutions to problems, particularly in the field of social relations.
2. To increase the pupil's understanding of the nature of his physical environment.

"Of first consideration is the problem of helping the pupil in his use of the scientific method. Is this best done by actual teaching or does it lie in a more effective use of instructional materials and aids?" Extensive research has proven that direct instruction in scientific attitudes pays large dividends and that pupil use of the scientific method is not a concomitant outcome of classroom instruction and laboratory work.

"It is important . . . that provision in the science program must be made for these habits (attitudes). The chances that they will develop as incidental learning to the acquisition of discreet scientific facts are very slight.

"Sound educational practice demands that less emphasis be given to formal examinations and more stress be placed upon the more informal aspects of evaluation. One thing is certain, we may now remove scientific attitudes and appreciations from the realm of pious generalizations and make them functional in the classroom by actually teaching them. Only then will they be learned.

"In a world so inexorably bound up with science, we must become more aware of the tremendously significant contributions to human freedom which the scientific method can contribute toward greater social conscience and political intelligence, without which democracy must fail."[2]

In what direction should science be extended? In general, elementary schools have long attempted to teach needed skills, encourage better use of leisure time, give definite information and ideas needed in everyday living. " . . . the information and idea subjects—usually include only social studies and science. The social studies includes history, geography, and the social institutions that have been devised or have been developed so that people can live together successfully. Science includes practically all the rest of the knowledge and the attitudes that the child should acquire in the grade school. Science includes all the child's study of his environment—the plants, the animals, and the inert materials, natural and manufactured, with which he comes in contact, personally or vicariously. This is an enormous body of subject matter which is of far more immediate personal value to the child than the contents of the social studies.

"In science the pupil also studies one other important object—himself. The most important thing in the child's world is himself, and he is anxious and capable of studying the human body and its care in a detached, rational manner. Because of this study of the human body and its uses, science is a subject that can guide the development of desirable habits as well as impart useful information, general ideas, and attitudes.

" . . . in the lower grades science is . . . more important (than the social studies) because the child is more interested in and able to learn about himself and his surroundings than about government, history, and social institutions."[3] We must not think that science is being taught in the grades just because science readers are

being used in the teaching of reading.

There should be a well-integrated science program from the beginning of educative experiences, throughout the entire extent of school attendance. Four years of science in the high school is essential. Just what four years of high school science should include or how it should be presented will be tentatively decided only as the result of much classroom experience and experiment.

Although there is little scientific justification for it, I believe we must fuse the traditional general science, biology, chemistry, and physics courses. We must fuse the materials of science about the problems of living. No longer should we say to sophomores, "We'll skip that until you take physics in your senior year."

"A 'good' teacher has always enriched the experiences of students. This is one of the outstanding characteristics of a good teacher. Students, also, have a part to play in the enrichment of a program if they are to gain the greatest value from instruction."[4]

Barren science classrooms and inadequately equipped laboratories must go. Effective teaching materials are a must. The wise science teacher will study and assemble for his pupils used textbooks, other reading materials, workbooks, and laboratory manuals. He will encourage the organizing of functioning science clubs and societies, the establishment of science museums, and the use of radio and recordio. He will take his classes on excursions and field trips.

There are many subjects of scientific interest which can be used as the core of the science program. The airplane is one of these.

"The lads who went to sleep while the falling apple made history at Sir Isaac's feet awoke with enthusiasm to calculate the velocity of a bomb dropped on Tokyo.

"Enthusiasm is the one great key to successful teaching: If you can't hold the interest of your students, you can't teach them anything. The airplane provides this much-needed hypodermic."[5]

Aviation has and is having great impact on our social, political, and personal lives. Aviation is of general interest to young people.

Conclusions: Science is not holding its rightful place in the curriculum of schools for the blind. Science is the best medium in educating youth for participation in a democracy. We must directly teach the use of the scientific method, realizing that pupil use of the scientific method is not a concomitant outcome of the study of subject matter and laboratory work. Science includes, not only the study of the child's environment, but the study of himself. Therefore it should no longer remain secondary to the social sciences in the elementary curriculum. Science should be continuously taught from grade one through high school. In the high school general science, physics, chemistry, and biology should be removed from their sacred niches and fused so they may better deal with the problems of living. Teachers and pupils must use every source both within and outside the classroom so as to cooperatively enrich the science program.

BIBLIOGRAPHY

1 Quimby, Neal F., **A Study of the Curriculum for Residential Schools for the Blind,** American Foundation for the Blind. 1940.

2 Ellis, Fred E., "Improvements in the Teaching of Science," **The Clearing House.** Vol. 19. No. 6. February 1945.

3 Hudspeth, Jack, "Don't Forget Science in the Grades," **Education.** Vol. 62. No. 5. January 1942.

4 Dowling, Thomas I., "How to Enrich the Future Science Program," **Education.** Vol. 65. No. 7. March 1945.

5 Evans, Ray Jr., and Johnson, E. M., "Aviation: Its Place in Tomorrow's Curriculum," **Education.** Vol. 65. No. 7. March 1945.

THE NEED FOR THREE DIMENSIONAL INSTRUCTION IN SCIENCE CURRICULA

WILLIAM T. HEISLER
Science Teacher, Overbrook School for the Blind

Fellow members of the A.A.I.B., it is both a privilege and pleasure to address you on a topic that has held my full interest since entering this field of education.

It is the duty of all teachers, whether they work with the seeing or the blind, to reveal and interpret the phenomena and laws of our three dimensional world. If we are to accomplish these ends we will have to make prolific use of accurate three dimensional sensory aids.

We must realize that the degree of pupil comprehension, aside from individual mental limitations, is directly proportional to the contact experience with the subject studied. The experience may be direct or indirect and vary in intensity; but it must be present! Most of the public school experience is visual; ours must be tactual and auditory.

As the result of careful observations of pupils, and conferences with blind members of the faculty, over a period of years the following conclusions were reached:

1. Fingers do not reveal perspective in two dimensional diagrams or pictures.
2. In practically all situations the fingers must examine objects piecemeal, thus requiring longer periods to gain comprehension of the whole.
3. Pupils' hands must never be forced down upon or hurried across surfaces.
4. Extremely small detail is not practically discernible.

Following is a classification of sensory aids arranged in sequence of increasing importance:

1. Verbal descriptions.
2. Embossed diagrams and pictures.
3. Analogical models.
4. Large and small scale models.
5. Full scale models.
6. Sound recordings.
7. Preserved and mounted specimens.
8. Living and unaltered specimens.

Let us consider the merits of each of the above and see the reason for its position in the table.

Verbal Descriptions: During a recent discussion in the General Science class, one of the pupils raised her hand and timidly asked what a funnel was. The teacher's answer was a visit to the supply closet to secure one for her inspection. Recurring incidents of this sort have motivated the writer into securing as many worth while aids as possible.

Verbal descriptions have their place in teaching techniques. In many instances the recalling of familiar experiences, which have actual bearing upon or are of analogical value to the topic, will accomplish immediate ends.

Unfortunately, certain pupils will feign understanding either to avoid being conspicuous or just to bluff knowledge of the subject. One must be on constant guard checking understanding with the use of leading questions.

Embossed Diagrams: In plane geometry, graph making and map study embossed diagrams have proven satisfactory. Many teachers, ignoring the absence of perspective, have shown their pupils embossed people, animals and architecture. It is true that pupils receive impressions from these so-called pictures; the fault, however, is that they merely receive an unusual outline associated with a name.

Analogical Models: When actual models of objects are unobtainable it is possible to make use of analogical objects. For example: the layers of pages in a closed book may be likened to soil layers or the layers of sedimentary rocks. Two clenched fists may represent the spatial relations and movements of the Earth and Moon. The blowing of warm, moist breath on a piece

of cold glass represents the formation of dew.

Large and Small Scale Models: While actual size is not possible with these models there is a similarity of shape and identical proportion of parts.

For objects too small for tactual identification, use can be made of large scale models. Plasticene clay can be used very effectively in modeling bacteria or the microscopic structures of plants and animals.

Small scale models are usually of such things as buildings, furniture and animals.

In stepping magnification up or down, one must carefully explain the identity of shape between objects of different sizes. This relationship may best be explained by showing or recalling the similarities between such things as marbles and tennis balls or puppies and dogs. Lack of such explanation is well illustrated by the little blind boy, who, after having been removed from the saddle of the zoo elephant, remarked that he had not been riding on an elephant—elephants were things that you could place on the mantlepiece!

Full Scale Models: Full scale models eliminate the necessity for explaining the magnification or shrinkage of the model compared to the actual specimens. Care must be taken, though, to explain the dissimilarity between textures of models and actual specimens. There are excellent commercial models of the viscera, but no stomach or lungs ever possessed surfaces like those of the plaster models.

Many of the models carried by the scientific supply houses are excellent for our needs, but are often quite expensive. In most instances you can fashion very acceptable models in plasticene or similar compound.

Preserved and Mounted Specimens: Included in this category are the products of the taxidermist, and the preserved specimens of the supply houses.

Specimens preserved in formalin or alcohol can be removed from their containers and examined by pupils. It is advisable to first wash specimens in running water and then to apply Lanolin to pupils' fingers so as to prevent any remaining preservative from contacting their skin.

Preserved specimens of practically every animal phylum and plant division can be shown to our pupils.

Whenever it is impossible to show important material at school a trip to the museum should be arranged.

Living and Unaltered Specimens: In this final and most important category are included members of both the animate and inanimate worlds: insects, domesticated and wild animals; trees, flowers; rocks; minerals and soil samples. These objects may be studied in the classroom, but as soon as opportunity permits the class should be taken out of doors.

The tremendous advantage to outdoor study is the opportunity to see completely unaltered material as well as the interrelationships between all parts of nature's pattern. Soil on bare hillsides is eroded into gullies while planted slopes are free from such damage. Tree roots split the mighty rocks, resulting in the formation of soil. A "big" tree is really big when three or more pupils are required to join hands in order to encircle it. Bird songs and calls take on new meanings; the squawks and whistles of blackbirds become associated with the tall grass of the meadow marsh, while the deep woods promise the shrill command of the ovenbird or the melodious warble of the thrush.

Breezes carry the scented announcement of a nearby pine wood toward which all steps hasten. Final stop is the brook, where the water, as it ripples merrily through the fingers, tells the story of the smoothly worn stones.

Happy, interested faces will reflect the joy of these experiences, and the multitude of questions will attest to the true value of this highest form of sensory education.

Thus our methods of teaching fall into three general categories: words, partial experiences and full experiences.

SCIENCE IN THE ELEMENTARY GRADES

C. F. RIDDLE
Science and Mathematics, Missouri School for the Blind

This subject, "Science in the Elementary Grades," is not intended to suggest that we begin at the cradle to train all children to be super-scientists, that they may wage wars of offense and defense more successfully, or make bigger and better atomic bombs. Rather, we are about to advocate that if science will play its full part in our educational system, wars will be less frequent and implements of death will be less necessary. The more completely man can control his environment, the more abundantly he can live and the less will be the pressure of material necessity. Wars will cease only when we have educated the whole world to the worship of a God of universal love and brotherhood, and when mankind is not too hard pressed by physical needs.

The theme of this paper is that science should supply the materials for the basic concepts of learning; that without clear concepts of, and experience with, the objects and materials of one's environments, learning is impossible; and that the most frequently met barrier to educational progress is the lack of such concepts and experiences. The next crusade for the improvement of our educational system will concern itself seriously with making certain that such concepts and experiences are supplied.

This paper will begin with the hypothesis that experience with material things is the necessary beginning of all learning. It is only as the learner has experience with material things that he can make mental abstractions, that is, form meaningful ideas. Therefore, it is the business of his early education to fill the stream of consciousness of the infant with multitudinous contacts with his material world. These supply what we call stimuli. The moment the infant begins to take cognizance of these stimuli his mental faculties begin to unfold.

The foregoing facts give science its claim to importance in the elementary grades. Education begins with the acquisition of concepts of material things. A child's very first steps in learning arise from his experience with objects and materials. He must have experience before he can learn. To the infant, a rattle to shake, a ring to chew, a ball to roll, are not merely for his amusement. They are the important materials of his education. In his reactions with them he is acquiring experiences, impressions, concepts. Sooner or later certain associations among these concepts begin to appear; and out of them arise ideas, judgments, and simple conclusions. Contacts, experiences, and reactions to them are the very essentials of incipient learning. Therefore, science, through the great outdoors and in the midst of innumerable life situations has the function of supplying copious and endless variety of stimuli, contacts, and reactions. Out of these a child must build his mental structure.

A child's store of simple concepts becomes his reference book. To these he refers all his additional experiences for their interpretation. As his experience horizon broadens, he observes new and interesting relationships among the materials of his stream of consciousness. His curiosity begins to function and investigation is initiated. As the amount of experience grows, the number of his concepts increases also. Richer and richer, deeper and swifter, becomes the stream of his mental life.

It follows from these facts, that to educate without an experience, background is impossible. Every child in his effort to learn immediately refers every new thing to his past experience. He can learn only by associating the new object, idea, or situation with something he already knows. If the gap between the thought and the old experience is too great, or if the experience necessary to comprehension is in-

adequate, he is likely to make the association with whatever in his experience he judges to have the closest proximity to the new idea. The picture that he constructs is often surprising, and sometimes amusing. An illustration will make my meaning clearer.

The class had read the poem, "The Old Oaken Bucket," and the teacher had told them to draw, as best they could, an illustration of what the poem meant to them. In due time she went the rounds of the class to review results. One little girl had drawn three buckets and several large dots. She explained that one was the old oaken bucket, another the ironbound bucket, and the third the moss covered bucket that hung in the well. "But what are those dots?" inquired the teacher. "Those," said the little girl, "are the loved spots that my infancy knew."

The lack of experience here is evident. The little girl had probably never once in her life, seen an old fashioned well with its bucket of oaken staves, bound round with iron hoops, and covered with moss. Neither were her memories of childhood, if she had any, associated with pleasant nooks and corners about the old homestead. But spots were to her such as were registered in her experience—ink spots, grease spots, or perhaps bright spots in a piece of dress goods—but certainly not the spots that "fond recollection presented to view" in the mind of the poet.

Thus we see that an experience background is essential to learning; and could we always see when and where it is lacking, we would often be very much astonished, but enlightened. There is not a barrier to learning that appears so often as the lack of some basic experience, without which the desired learning cannot take place. It is most often some physical experience, but sometimes it is a lack of sufficient relationship between the concepts we already have. But in multitudinous instances this ghost of vacancy haunts us. Science cannot wholly fill this costly void; but since it underlies all material things, it can supply many a rudimentary idea for the true foundation of the learning process.

Mental concepts must be abundant in the mind before abstractions can be made, or relationships comprehended. Obvious as it is that a child cannot learn without an adequate background of concepts, we still make the mistake too often of trying to teach that for which the learner is wholly unprepared. When experience with material things is lacking there is a grave danger that the deficiency will pass unnoticed. Our tendency is to assume that one telling in simple words will suffice for any lack of actual contact with real situations. But such is by no means the case. Imagine trying to teach a reading lesson about a hay ride to a class, not one of whom had ever seen a load of hay or a team of horses. There is danger that we would decide that a simple description of the load of hay and the horses was all that was necessary. We would assume that the whole picture were clear and that the class would be able to revel in the full joy of the occasion. But the comprehension of new ideas is never instantaneous. It takes time, contact, and experience.

Too often we do not realize that the physical world must furnish the material for learning. The whole learning process has its beginning in the physical world. Every thought we utter, every idea we possess, every conclusion we draw, must trace its incipiency back to a concept built from experience with material things. Every advance in mental growth must have its experience background. This experience is with concrete, tangible things. No abstraction is possible, except that it emanate from concrete concepts as its source. Rational relationships exist for children only between things that experience makes comprehensible.

The function of science, then, is to fill the life of childhood with concepts of tangible things, and with numberless simple experiences that manifest the operation of nature's simplest laws. From such must be built, in every learning situation, a foundation that articulates with the new ideas to be imparted. Too often subject matter is chosen with no consideration for the pre-preparation necessary for its mastery. Whole gaps are left in the child's

knowledge that leave him in a condition much as you or I would be if given pages of matter to read with half the words missing. His capacity is inadequate and he is helpless. There is one thing we can do for children that is better than to educate them, and that is to increase their capacity to be educated. If, and when, science plays its full part in the elementary grades, lack of capacity to learn will be less frequent in our teaching procedure; for the life of every child will be richer in basic, physical experiences.

So if elementary science is to make its full contribution to education we must, in large measure, make amends in the schoolroom for what its four walls shut out from the great outdoors. We must draw from the world of plants, animals, and minerals. Our specimens must not be selected at random, but each must be chosen with a definite educational purpose. Planned activities must take the place of desultory observations. Organization and gradation must assure that each lesson will so articulate with the one that follows that continuity of mental progress will be possible. Each school must be able to depend upon its own devices and materials. These should be conveniently arranged and ready at hand. A city museum helps but it is not adequate. Too often you cannot get what you want when you want it. Many planned lessons should be provided, but the planning should not be obvious to the children. The teacher should know exactly what the children are to do with the material, or subject matter provided; and exactly what the end and purpose of each lesson is.

We should not deceive ourselves with the idea that any conscientious teacher can choose, plan, and organize sufficient subject matter from day to day to suffice for a full course. The task is not so simple. We might have a central committee to whom might be referred from year to year lessons and materials that individual teachers have organized and found workable. But a central group must give final organization to the whole.

With such objectives reached and consummated, science in the elementary grades may one day come into its own.

REPORT OF SECTIONAL MEETING, WEDNESDAY, JUNE 26

Science

Chairman of Section Meeting, 1946-1948, Mr. Mathew Stanley, Connecticut School. He will choose his own Secretary.

CHORAL MUSIC AT PERKINS

Its History and Philosophy

JOHN F. HARTWELL

Choral music and Perkins have become almost synonymous terms. There are very few of our former choir members who do not devote a large part of their thinking about school days to the chorus with its joys and imagined troubles, its hard work and play, the almost tragic, and often humorous situations which sometimes developed, the scramble to finish preparing for a concert program, the thrill of doing a good job before a large audience. They remember the emotional stimulus, the mental awakening, the competitive spirit of trying to outdo the next fellow or the other section, or to give a better performance this year than last, the many pieces of music that are always humming more or less unconsciously in their minds. They

have profited by the discipline of cooperative effort, the submerging of personalities in the interest of tonal balance and volume, the satisfaction which many have experienced of continuing choral singing in the home church or town, the happy recognition of hard-learned but well-loved tunes on radio or concert programs. All of these joys and benefits come to the boys and girls who have been through the "grind" and have begun to reminisce. The knowledge and power gained in the years of choral work are a continuing source of solace and satisfaction, and chorus singing is more kindly remembered by them than any other school activity.

But not only to former pupils does Perkins stand for choral music. Fifteen hundred persons each year hear the Christmas programs, a few hundred more listen to the Spring concert, and unnumbered hundreds hear the small choral groups in churches, clubs, and on the radio. Encounter any of these listeners and they invariably speak of the singing in terms of warm appreciation; they often become staunch friends of the school, and spread the gospel of the blind far and wide. Just how much of the general public's meager knowledge of the blind and their problems may stem from this source cannot be known, but it surely is not insignificant.

Chorus singing is one of the most healthful exercises known. When properly conducted it is of great value physically, mentally, morally and spiritually. A chorus singer must be prompt, orderly, attentive, exact—all of which helps wonderfully in developing those traits of character and habits which go far towards making the individual successful in any walk of life. Participation in choral work here at Perkins has repeatedly transformed the coarser and cruder ideals of pupils, and awakened in them a real appreciation of good music.

Class singing has been practiced at Perkins for a great many years. There were singing classes as far back as 1877, and probably much earlier than that. I can find no record of boys' singing classes, but at the Commencement exercises of 1882, mention is made of some chorus singing, probably by mixed voices, as a chorus for "female voices" also appeared on the program. Singing by mixed voices is mentioned on a program in 1890.

By that time some girls' singing organizations had been formed with Miss Riley, a piano teacher in the girls' department, as leader. There were the "Merry Warblers" composed of little children, the "Polimnian Chorus" for older girls, and a girls' quartet called the "Romana Club"—named for Mrs. Anagnos, wife of the second director of Perkins, whose middle name was Romana. These singing clubs prospered through the nineties and probably well into the new century. They continued in spite of the fact that many of the girls were inducted into the orchestra, which by 1895 had taken the place of the band.

I have been unable to ascertain just when the mixed chorus came into being. The orchestra flourished from 1895 to the summer of 1908, and its last public appearance was on June 9, 1908, when it shared the program with the mixed chorus of about eighty singers. A mixed chorus sang for Commencement in 1907. This would imply some previous rehearsals and some preparation of Braille material at least a year or two before 1907.

In 1911 the Institution was moved to Watertown and a schedule of four rehearsals a week which has been adhered to ever since, was assigned to the chorus. The first six public performances by the chorus were held in the Spring of each year, but in 1915 a program of Christmas carols was given—the first of an unbroken series. The Christmas programs grew in popularity and finally, about twelve years ago, came to be the chief musical event in the life of the school, although occasional Spring concerts of secular music were still given. For many years there were two performances of each of the choral concerts, one here at school and one in Jordan Hall in Boston. During the last few years a third performance has been added, and two years ago the Jordan Hall performance was discontinued because of transportation difficulties, and because it was felt that the chorus sang more effectively

in its own hall than in a strange auditorium. Dwight Hall has been filled to overflowing at all of the three performances each year.

Mr. Edwin L. Gardiner, who was director of music at Perkins from 1895 until his death in 1933, was very fond of the orchestra, and in 1925, arrangements were made to use the Vannini Ensemble for the accompanimental work in our concerts. This Ensemble was composed of a group of about fifteen men from the Boston Symphony Orchestra who came for one rehearsal and one performance, and added a great deal of color to the occasion and a degree of stimulation to the chorus. Mr. Gardiner was always in his glory at these concerts, and the performances, while not entirely satisfactory from the artistic standpoint, due to insufficient rehearsals, and possibly a complacent and rather condescending attitude on the part of the Ensemble, nevertheless made up the deficiency quite largely in verve and enthusiasm, and were acclaimed a great success. The orchestra was employed for every Spring concert for eight years, and was discontinued after 1933 chiefly because of the expense involved.

Until 1933 the chorus members were cheered and inspired by the presence of staff members who were invited to participate in the choral work, and particularly by the soloists from without the school who were engaged for many of the concerts. As few outstanding voices were developed among the students, it was thought necessary to employ these soloists in order to have free use of the vast repertoire of choral music, much of which calls for solo voices. These soloists, chosen from among the best artists available in Boston, had a marked and salutary effect on the morale of the pupils. Their brief association with these artists would be remembered for many years, and no doubt many of the pupils were inspired to greater efforts in their vocal and chorus work. In 1933, the Board of Trustees of the Institution decided that, with the exception of the director and the accompanist, all who took part in the choral work must be without sight, and so, since then, we have largely been limited to the study of works written without solo parts. Fortunately, two or three of our pupils developed to the point of doing excellent solo work in cantatas and other choral numbers, and so the limitation has not resulted in the total abstinence from this form of music.

The study of choral music is begun in the third grade. This is, of course, one part, and later, two part music, and all rote singing. As soon as music Braille is learned, reading by touch is introduced, and it is continued throughout the school career. We do not believe in, nor indulge in rote singing except for the very early grades. Learning the music from the Braille copy saves a great deal of time. It was noted a few years ago that in one season of thirty-six weeks the chorus read from Braille, memorized, and sang in public thirty-three pieces of the usual anthem length, with a few hymns thrown in for good measure. Reading from Braille insures accuracy. The pupils, most of whom have had solfeggio work, do not have to depend upon hearing the phrases pounded out on the piano many times, but are able to read at "sight" and sing the intervals correctly. After two or three readings of a phrase it is usually accurately memorized. Braille reading fosters independence. Most of our pupils scorn rote singing when it has to be done at rare intervals because some necessary piece is not in Braille. They want to learn the music "by themselves." By encouraging them in this way to stand on their own feet, they are better able to maintain an upright position later in life. And finally, with Braille copies of the music available, the necessity of finding readers to look up forgotten passages is avoided.

The children of the 4th, 5th and 6th grades meet in classes for their rote singing, their solfeggio and their note reading. They sing hymns for morning assemblies, learn many songs for children, and prepare several pieces each year for the Christmas program. In the upper school they immediately join the chorus, sitting in front of the older singers, reading as fast and as well as they can, but undoubtedly absorbing a great deal of the music

and words from the surrounding pupils. As they gain in years and experience, they are gradually moved to the back seats, and, in their turn, help to instruct the younger pupils. During their years in the upper school these young persons learn between forty and fifty anthems, about the same number of hymns, an equal number of Christmas carols, and from fifteen to twenty-five secular choruses. About forty pupils receive vocal instruction each year. The seventh grade children meet in small classes, vocalize in unison, and learn from the Braille one- and two-part songs. In the eighth grade the classes are smaller, and some individual vocal instruction is given. Beyond the eighth grade, the pupils with the most promising voices are given private lessons; others meet in classes of two, and some are dropped altogether.

At nearly every morning assembly throughout the year the chorus sings an anthem and a hymn. Sometimes a solo or a duet is substituted for the anthem. One of the most anxious, and usually the most gratifying moments of the entire year is when the chorus sings an anthem on the morning school opens in September. It is remarkable how smoothly it goes as a rule, but not surprising when one considers the thoroughness with which it was learned, and that Braille copies are available to assist in any slips of memory that may occur.

For many years it was believed that our chorus could not successfully perform a capella numbers. It was thought that attacks and releases would be ragged, and tempos unsteady and wavering. During the past dozen years this theory has been tested and the chorus has done several a capella pieces most satisfactorily.

As mentioned before, the chorus sings the Christmas program three times each year, and often a secular concert in the Spring. It has sung over the radio, and for conventions, music festivals, pageants, high school assemblies, and for many special occasions at school. The members are all rather proud of the chorus, and a few years ago on the occasion of a vote being taken as to whether chorus practice was enjoyable or not, only one pupil was registered in the negative.

There are two other singing groups in the school at present, both derived from the full chorus. One is the Girls' Glee Club, which is the successor to the "Polimnian Chorus." It was reorganized in 1911 by Miss Mabel A. Starbird, who came to us in that year to teach singing, and was retired two years ago. This club, which varies in size from year to year, but averages about twenty girls of high school age, meets twice a week for rehearsals and sings a somewhat lighter type of music than that used by the full chorus. It has done some radio work, and is in considerable demand for church entertainments and clubs. These girls derive a great benefit, socially, from these engagements, as opportunities are thus provided for donning evening dresses and meeting a great many fine people. The other group was organized two years ago, and is called the Boys' Octet. It rehearses twice a week, and has been successful in many engagements with clubs and schools.

A few words about the technique of training a chorus of persons without sight. Singing without expression is meaningless, therefore one basic principle which underlies all our work with the chorus is that "initial attacks and final results should correspond very closely." For instance, a pianissimo or a fortissimo passage is always sung pianissimo or fortissimo; crescendos, diminuendos and ritardandos are always sung at the proper rate and degree of increase, decrease or retardation, etc. When someone says "what wonderful expression! How is it done?" the answer is simply that the expression is always practiced. Having never sung a passage other than indicated in the music, there is no possibility of its being sung in any other way during the performance. The only real problem is with the question of tempos, and this is because of the comparative slowness with which the Braille has to be read. However, as soon as possible the music is taken, and thereafter maintained, at the correct tempo. We have no fancy theories about enunciation or pronuncia-

tion. Vowel sounds are not distorted, and beginning and ending consonants are stressed. The singers are encouraged to use their mouths in singing and to make their diction in general as clear as possible, and the result seems to be generally satisfactory.

The procedure at rehearsals is as follows: first, we give out the Braille copies of music. Then, as a rule, the girls, and afterwards the boys, read their parts, singing at the same time note names, or the syllable "ah," or humming with parted lips. A paragraph, which usually consists of one or two phrases, is read through in this way several times, depending on the difficulty of the music, and then the four parts are sung together. After the music is fairly well memorized, the words are often read to the chorus as a help in the Braille reading. The pupils experience no particular difficulty in memorizing the music, but considerable time has to be spent with the words before they are fully memorized. The balance of parts requires some care, but comparatively little attention has to be given to tone quality, perhaps due to the fact that more than half the pupils receive vocal lessons. This completes the method of procedure except for refinements of shading, pronunciation and diction.

Blind persons, in the opinion of the general public, are particularly musical. They have a wonderful "ear" for music, draw beautiful tones from the piano, sing from the heart, etc., etc. This conception of the non-seeing person's capabilities is probably largely due to the fact that music is the only art which the blind can appreciate, or in which they can participate. It is only by means of music that they can attain an equality with seeing persons in the realm of art. Being known only in this particular field, the fiction grows that they easily excel in it. It has been proved at Perkins that this estimate, in so far as it applies to choral singing, is not altogether inaccurate. Our students, because of the long tradition of part singing, because of the early rote work, the solfeggio, and the vocal lessons, and because of their enjoyment of choral singing and good music, do sing well—exceptionally well for boys and girls of their age, and who shall say how much of character is built into these personalities through this medium of choral music.

BRIEFS ON TEACHING MUSIC THEORY

EDWARD W. JENKINS
Perkins Institution and Massachusetts School for the Blind

The theory of music is, in this instance, defined as all forms of study except that of applied music.

Solfeggio.

Solfeggio is a study of fundamentals. The training of the ear is requisite. The blind student must have a good knowledge of staff notation, and it is helpful that he be given some notion of the pictorial nature of this notation. The nature of rhythm must be understood by the student. Care must be taken to make the student realize that intervals are measurements of note-distance, not of tone-distance. This last is of great importance.

Harmony.

Teach the harmonization of melodies, adding alto, tenor, and bass. Teach chord inversions early, so that the bass may have a smooth melodic line abounding in stepwise progressions. As soon as possible, teach dominant discords so that the subdominant and leading tone may be seen to be tendency-notes. The suspension, embellishment, and passing-note should be introduced early in the game, as this removes the disagreeably vertical approach in harmony exercises and introduces the horizontal as an artistic element; imitation may appear at this time in exercises. In-

troduce simple modulation at the point where a broad diatonic vocabulary is established. It is advisable to teach all the categories of augmented sixth chords as altered dominant discords. Teach the harmonization of chorale melodies using the passing-note, suspension, and embellishment as ornaments. Introduce the free ornaments later: the free suspension, anticipation, appoggiatura, free anticipation, and pedal. It is best to do analysis work along with the harmony lessons.

Counterpoint.

It seems best to use the florid cantus as soon as possible. The modes are the habitat of old counterpoint, not our major and minor keys. Various techniques of imitation and canon should be taught as soon as possible. Double counterpoint is easy to teach by a method of using simple equations to show the interval relationships in model and inversion.

Music Form.

The paper deals with a rather complicated philosophy of form.

History.

Every phase of our contemporary music has artistic antecedents. The realism of Strauss is matched by the realism of Couperin and Kuhnau in the eighteenth century. A few other tenets in a philosophy of history are given in the paper.

Improvisation.

It would seem well to encourage improvisation as an outlet for those blind students who can be proficient in it. Improvisation is an art of integrity and not a patchwork of showmanship and charlatanry.

THE TOMORROW OF MUSIC EDUCATION WHICH IS NOW TODAY FOR THE BLIND

Director of Music, Indiana State School for the Blind
MABEL C. LEIVE

When our chairman, Mr. John Meldrum, director of music of the Oklahoma School for the Blind, wrote to me to ask that I write a paper to be read at this convention and suggested that I write about something in which I was interested, I immediately thought of my title as expressing my paramount interest. As I recall our last convention, especially the music section in which we discussed materials available, textbooks, new music, radio, recordings, and in the personality field, the development of attractive habits and behavior, it seems to me that while we had very stimulating discussions, we really didn't arrive at too satisfactory conclusions concerning the basic problems with which our schools are confronted.

As we all realize, the last five years have been very difficult with the many shortages of materials and personnel and the resulting unrest which they created in both teachers and pupils alike. Let us hope that we shall in the future have all the necessities which lead to the living of a sane and wholesome existence.

Life demands much of youth at all times, but today especially the young people must be able to adapt to the conditions with which this changing world confronts them. If this is true for youth in general, it is a hundred times more necessary that we equip our students so that they can face with inner certainty taking their place in competition with the sighted. The normal boy and girl accept the atomic age and welcome it, but from my observation the blind students seem to be concerned and confused. They dread entering college and working along with the sighted students. They have much more apprehension as to their ability to succeed than those students who were in school several years ago. They seem eager to discuss with me their

limitations; in fact, they bluntly rebel against the fact that they are thus handicapped. What can we as teachers of music do to allay these fears and resentments?

With this question in mind I decided to write to the music departments of a number of our schools asking them for their ideas, and I was surprised and comforted to learn that their ideas and problems were the same as mine. They were interested in improving public relations, public school music for the blind, the use of records, radio, and recordings, print music for the blind, and related matters.

We have all been told that when the war was over, we as teachers would have to be open-minded to accept the changes in educational ideology and procedures. I feel that time has arrived. We teachers of the blind must re-evaluate the world and decide how we can best prepare our students to take their place in that world. We must emphasize good public relations. As our students return to their homes which are a part of the changing world, they must be able to feel that they are contributing members not just encumbrances. Are we teachers of music succeeding in giving our students the proper and substantial foundation through music (for I feel that no other subject has the same opportunity to give the individual what music can offer) to meet these situations? Someone has said that democracy means "the greatest good for the greatest number." Music has spiritual values that are needed in our democracy. In this machine age beautiful music reminds man that he has a soul. We teachers should strive to give our students sufficient knowledge that they appreciate good music and that through our students the parents and the laymen with whom they come in contact may have better understanding of music, thus giving the sighted and the blind a common experience on which to base better and fuller comprehension of each other. It is up to us as teachers of a special subject to educate administrators and teachers of academic and scientific subjects to appreciate the value of good music in all fields because it gives a common meeting-ground.

If great minds of our time can harness atomic energy, surely the forces of good can control that same energy. What attributes should a teacher of music in our schools have to help the school as a whole to contribute to those forces of good? The teacher should have as broad an understanding as possible of the trends in all fields of education; it is not enough just to know his own field and its trends. He should have as many contacts as possible outside the field of education so that he can sense business, political, and international policies in order that he may give his students some insight into the relationships between the material and spiritual. It is through the teachers that boys and girls mold their ideas and ideals to meet the conditions of today. Music is an expression of human experiences. We have an excellent opportunity to re-evaluate our music education program. Students need a deeper grounding in the fundamentals. We need a new insight into our original aim of bringing music to all the pupils in whatever varied conditions we find them, making it a warm and living part of their daily lives. Since high school is the end of formal education for the majority of our students, it is absolutely necessary that our public school music program be as complete as possible in order to prevent cultural barrenness. We must increase our efforts toward bringing music into the lives of more and more students not as a snobbish and highly-skilled art but as a pleasurable activity leading to the young people's realization that it is valuable to be able to sing or play even if they are not artists. We must put our subject teaching on their level so that they can feel that music belongs to them and furnishes an antidote to the monotony of their daily lives.

I have taught music in our school for the past sixteen years, and I have maintained my private studio in Indianapolis, where I have taught for many years. My students range in age from three years to college students and adults. Because I have private students as well as my pupils in the school, I feel that I bring the outside world to my school classes and the classes

to my private students. I have been active in the musical circles of city and state for many years. Students from the school have the privilege of appearing on my student recitals which are held down town. This experience is very valuable to the blind student because he has the opportunity of competing on equal terms with the sighted and normal student. Sometimes the adventure is discouraging, but most of the time it is encouraging because it enables the blind student to feel less self-conscious and apprehensive. It is against this feeling of inferiority that we teachers can be helpful. By encouraging our students and by assuming direct responsibility for their social life, we can help develop their personalities so that they can feel comfortable in any group.

In our school we have formal instruction in all music subjects with supervised practice periods in special subjects and a complete public school music course. I insist that every boy and girl from the first grade through high school come to the music hall every day for one period of singing. At this time we have very liberal discipline; youngsters have much freedom. They look forward to this period each day. It has taught them the desire and love for singing and they enjoy it immensely. If the child receives this training from an early age, it becomes a part of him. This program has proved valuable many times. It has also provided pleasant recreation because it is at this time that they listen to radio programs that we consider worth while. Our public high schools broadcast weekly programs, and we also are given the opportunity to appear on these programs. At other times we play records, lighter in vein than they are for history of music class. In theory and appreciation classes we use the symphonies and better music. We make recordings of all our closing work and programs including all special events or outstanding pieces of work. The file of these recordings forms a link between present and future, giving future students an idea of the kind of work done by their predecessors.

Mr. Chairman, I should like to recommend that you appoint a committee and instruct the members to investigate the following phases of music education for the blind:

1. To ascertain how many schools use the Sea Shore Musical Talent Tests and what use they make of the results. We use them in our school, and I find they are a stimulus to students' interest.

2. To look over textbooks and educational aids in order to recommend those which better meet the problems we are facing today. Along this same line of new teaching techniques and materials, the committee should also consider material suitable for use with children who have partial vision.

3. To re-evaluate and then revise the Braille Music Primer, including a double index similar to our Latin-English and English-Latin dictionaries. The Primer should also have explanatory notes and the revisions written in Grade 1½.

4. To collect ideas from the various schools as to acquisition of more varied materials from the American Printing House, and to establish some procedure for printing materials for use in individual schools. The present system (where a certain number of schools have to agree to take the same music before it is made available to any) is far too limited for the teaching needs of today. For example, we need more music in the field of woodwind instruments, organ, cello, and even piano; we could also use songs in the popular field which are apt to become standard numbers of the future. The committee should try to effect this revision in order that each school may have the kinds of teaching material it desires.

5. To send reports of all findings to the music directors at each school at least once a year—more often, if possible, so that teachers may receive inspiration from learning about the work that others are doing.

I have been dealing with the subject of making music a comfortable emotional experience for all students, but in closing I don't want you to feel that I'm unsympathetic with the extremely talented blind students. Every one of us will agree that

the exceptionally gifted child is a stimulus, and we should strive to see that he has every opportunity to achieve distinction to the same degree that he would have if he were able to see. It is he whom we should struggle to train most thoroughly to write print music so that he will be able to take his place in the musical world with utmost confidence. I'm very proud of one of my students from the school, who majored in composition in college, competing on equal terms with sighted students. He took a complete college course and finally received his A.M. from Eastman under Dr. Hanson. Of course, such students are rare in our experience, but we must have the facilities to arouse and stimulate such students when we're fortunate enough to meet them.

May we as music teachers feel so strongly that music is of the utmost importance and inspiration for each and every student. May we recognize its value in mental training, its cultural influence in character formation, and its value in developing in each child according to his talents the ability to perform or appreciate music. We have to feel that these values are of vital importance to put across to administrators and the public the understanding of the need for music's expansion and revision in the public schools.

REPORT OF SECTIONAL MEETING, WEDNESDAY, JUNE 26

Music

John Meldrum, Oklahoma, Chairman; Bassett W. Hough, Acting Secretary.

The meeting was well attended by members of the music staffs and visitors from many states. Officers were elected for the next biennium convention as follows: Chairman, Mr. Edward W. Jenkins, Perkins; Mrs. Edward W. Jenkins, Perkins, Secretary.

Mr. Meldrum opened the meeting with very provocative remarks in which he called attention to the challenge imposed upon our schools by modern trends in composition and by the development of electronic and other modern instruments. He spoke of the necessity of our keeping abreast of the times in these matters and of our showing sympathetic understanding of the enthusiasm of our young students for manifestation of current idioms in serious and popular music; the problem being to strike a happy balance of restraint and tolerance. He also called attention to the serious need for a text in Braille dealing with modern harmony and additions to the present available amount of modern organ music. He touched upon the well-known fact that many of our organ graduates, although thoroughly competent musicians, find difficulty in securing adequate church positions, comparing the situation in our country unfavorably with that in certain foreign countries.

Papers were then read by Edward W. Jenkins of Perkins, on "Briefs on Teaching Music Theory"; and by John F. Hartwell, Director of Music at Perkins, on "Choral Music at Perkins." A paper entitled, "The Tomorrow of Music Education Which is Now Today for the Blind," by Mrs. Mabel C. Leive, Director of Music of the Indiana School for the Blind, was read by Miss Grace Towsley, Director of Music of the New York State School for the Blind, in the absence of Mrs. Leive. These papers brought forth interesting and significant matter and were heard with attention and interest.

THE VALUES OF WRESTLING FOR THE BLIND

JOSEPH LYONS
Maryland School for the Blind

Physical education in schools for the blind has always been a problem. It is rather difficult to find an activity which will interest a group of blind boys. Most blind children have had very little active life before coming to school; therefore, special physical training should be given these youngsters to overcome their inactivity. I feel that competitive sports are the only things that will gain and hold the interest of the boys. There should be more competitive sports among schools for the blind, other than a few annual dual meets. Wrestling is the only sport in which our boys can enter on an almost even basis with sighted boys. Inasmuch as wrestling is the greatest sport for the blind, why shouldn't all of our schools make wrestling a major event? The values of wrestling are:

1. Balance. Unfortunately, an additional handicap found among most blind is poor balance. To overcome this, it increases the problems of the gym teacher. Since most authorities consider wrestling as being made up of 80 per cent balance, then it would seem that wrestling would be the best means of activity available, to the gym teacher, for improving balance, and sense of direction, which are so closely related to good balance. Closely allied to these functions is coordination—the ability of the mind and muscles to work in unison. Together these functions increase physical efficiency.

2. This leads us to the second value of wrestling. Most blind youngsters lack self-confidence to a major extent. This is usually due to the parents, not knowing what to do with, or how to handle the sightless child. They have taken the path of least resistance, and have catered to and done everything for the child. This, of course, greatly impedes the development of self reliance in the child. Wrestling develops balance, sense of direction and coordination, which provide a firm foundation for self-reliance and self-confidence.

3. Not to be forgotten is the social value of wrestling. It is very important for the blind pupil to build up social confidence among sighted people, since his contacts after leaving school will be almost entirely with normal persons. Through traveling, and through competing against other schools, both for the blind, and public or private, the pupils build up a social ease and confidence, and at the same time the sighted boys build up and learn an ease in associating with and handling handicapped boys.

To increase the scope of wrestling, greater interest should be sought. One excellent means of increasing interest would be through more competition, such as might be found in the establishing of an inter-state league among schools for the blind. The cost, if divided equally among participating schools, would be small. Proper publicity might make the meets self-supporting, and would create greater interest on the part of the public. This would open the way to more competitions with public and private schools—thus providing the maximum development and use of the many values and advantages of the sport of wrestling to the blind and their schools.

PHYSICAL EDUCATION AND MORE OF IT

W. E. BURROWS
Director of Physical Education, Virginia School for the Blind

It would seem hardly necessary at this time to point out the many and varied benefits derived from a well balanced and planned physical education program. Further it would hardly be worth while to elaborate the purposes and aims of physical education. I feel sure that all of you in attendance at this meeting are sufficiently informed as to the phases of this subject. Certainly in a broader sense. I have but one intent through presenting this paper. I have a single paramount thought to pass along to you. That thought is, I trust, specifically expressed in the title of this paper. "Physical Education and More of It."

Please consider me for the next half hour as a salesman. Superfluous as it may seem, I want to sell you something that has already been sold. A need that is recognized by all to be of unquestionable value to every sightless boy and girl. Yet never such a definite part of our school curriculums that the fullness of its worth is completely and wholly received.

Too often physical education in our schools is squeezed into the weekly schedule. Too often not nearly enough time is allotted to the instructor. Too often the necessary equipment to carry out a well-rounded program is not available. Too often the physical education teacher is asked to assume so many responsibilities about the school that he neither has the time nor the energy to give his chosen work the attention a diversified program requires.

Physical education in a school for the blind, in many instances is an individual undertaking. A goodly number of our students need and should have special class work. Carefully designed for them alone. These children are so often affected with postual defects, a mannerism and most of the time so very little body coordination and control. These afflictions can be corrected for the most part by special class work, designed exercises and individual attention.

The outstanding problem facing us is how can all of our students that need such a program as this be reached? How can one instructor attend personally to each of the class members? He has in many cases a shortened academic period for his physical education. He cannot. At the same time, it is agreed, however, that the blind or partially sighted child can become normal in his appearance through physical education. This is so worth while —always important. So often a graduate from one of our schools is well schooled academically, socially adjusted and altogether ready to make his way as a self-sustaining person only to have these required attributes marred and ruined by a postual defect, a mannerism or some other unnecessary physical drawback. If a student leaves our schools with a physical defect that could be corrected then he is not our best possible graduate. We shall be failing in a vital part of our education.

A strong healthy body, a well poised physique and a controlled nervous system is and must be a definite part of our training. The external appearance of our boys and girls can be their strongest aspect and their best prospect for making a livelihood. A noticeable postual characteristic or mannerism calls attention to his visual handicap and lessens his chance for success and opportunity. A blind person, unfairly as it may seem, perhaps, is expected to do a job better than his sighted competitor. He can little afford to further burden himself with a defect that might have been eliminated through physical education. He is always called on to make an outstanding first impression. Such is impossible if he has an abnormal physical defect.

We need a broader and more far reaching program of corrective and preventive physical education in most of our

schools. More time and better equipment to be given over to this important phase of the blind child's school life.

In some of our schools physical education is offered but once a week. In many cases it is taught by the classroom teacher. This teacher has so often had no training and many times very little interest. This is not as it should be, it is unfair to ask the classroom teacher to assume this part of the school program.

Because physical education is so vital to the blind child; because physical education can do so much for the child; it would seem that every blind school in the country could provide a program that would reach every student regularly. Assigned daily class, a trained instructor. We cannot feel satisfied within ourselves if we do not extend our children every possible means in order that they shall leave our schools normal in physical appearance. This is our assignment, we can do it, we must do it.

REPORT OF SECTIONAL MEETING, WEDNESDAY, JUNE 26

Physical Education

Chairman for next biennium—Mr. Charles Buel, California School for the Blind.

Secretary—Miss Dorothy Rodgers, Iowa School for the Blind.

PRACTICAL DEVICES FOR TEACHING SOCIAL STUDIES TO BLIND STUDENTS

ILA PARENT
Fifth Grade Teacher, Louisiana State School for the Blind

For a number of years I have felt keenly interested in the social studies program and in the newer and better methods which have been developed and introduced in the teaching of the subjects included therein. I have gotten a great deal of pleasure and benefit from the college courses which I have been privileged to take in the social studies field during recent years. I cannot think of a more fascinating and timely subject than one which deals with the study of the earth and the story of its people. But to my astonishment, I have discovered that I am one of the few individuals who find pleasure and satisfaction in the pursuit of such studies. I have observed that a number of my fellow classmates often appear to be disinterested, bewildered, indifferent, discouraged, and sometimes unable to follow the professor's discussions. If college students cannot manage to feel too much enthusiasm for courses relative to the world and its affairs, I begin to wonder just how much interest we should expect our young elementary school children to manifest in such studies. It did not require a long period of time, nor much observation, before I was convinced that a number of our blind students just didn't like, or were indifferent to, the social studies. I discovered, also, that there were usually low or failing grades in these subjects. If such conditions as these prevail throughout our schools, surely we are losing a golden opportunity when we fail to make the study of our world, ourselves, and our activities one of the favorite and one of the most interesting subjects in our school curriculum. Through the social studies program we should be able to teach our pupils to live happily, cooperatively, intelligently,

and peaceably together in their own immediate group. Once we have accomplished this within the group, there is hope of extending this better way of life to the community, the state, the nation, and the world. This is certainly a challenging thought, since there is such a crying need for just such a way of life among the peoples of the world at the present time.

During recent years I have given much time and thought to ways and means of enriching the social studies field in an effort to make the subjects here included as thrilling and as inviting to my students as they have been to me. I should like to discuss, briefly, some of the materials and methods which I have found particularly helpful in enabling me to achieve my purpose. I know of no other field which lends itself quite so readily to the unit method of teaching than does the field of social studies. Occasionally, I have found it wise to guide the children in their selection of a unit of work, but whenever it is possible, I think the students should choose something in which they have a real interest. During the year, the fifth grade was making comparisons between the forests of our own Southern states and those of the Northwest and other regions of the United States. I remarked that I thought trees could tell us many facts about new and unfamiliar places. Of course, this afforded an opportunity to consider the factors which determine plant growth: sunshine, soil, rainfall, and temperature. After some discussion and study, the class asked if they might find out more about trees. They began by learning as much as they could about the different types of trees and the different places where these trees could be found. The next questions to arise were relative to the uses to which man has put trees. This led to the study of making wood pulp into paper. Then the pupils wanted to know the history of writing and writing materials throughout the ages. The class found out that our principal, Mr. Gill, had an exceptionally attractive and interesting notebook relative to the evolution of writing and writing materials which he had compiled during his college days. The class invited him to come in and read this notebook to them. Finally, the children planned to visit a newspaper office. Each child had a number of questions which he wanted to ask. A list was made of the machines and equipment which the students wished to be shown during their visit to the newspaper office. Neither the children nor I had realized that there were so many interesting facts to be learned about trees and topics related to them. The students learned much from the study of this unit and they had a wonderful time doing it.

Since those who are handicapped by the lack of vision must of necessity acquire the greater part of their knowledge through the ear, I should like to suggest the use of the phonograph, the radio, and the Talking Book as excellent devices in teaching social studies to them. Several months ago when the question arose as to what should be done concerning the Panama Canal, the fifth grade became interested in the Panama Canal and the Panama Canal Zone. I was glad that our library included **Across the Isthmus** on the Talking Book, and that the Braille edition of **My Weekly Reader** contained an interesting article about the Panama Canal.

Braille magazines, specimens, and models of various types all supply us with good material for teaching the social studies. We can make use of oral and written reports just as one might use them in teaching sighted children. Some of our students, like other children, have the collecting instinct. They frequently collect coins, shells, flowers, bottles, and even picture postcards. This hobby can prove helpful in teaching the social studies. The students in our school keep notebooks and make various kinds of scrapbooks. One group has made a booklet of the United States. Each page of the book is cut in the shape of the United States. A picture of each State Capitol has been placed on a page with an accompanying paragraph telling some important facts about it. Each state in the Union was cut out of construction paper, and although some of the states cut by the totally blind are not so neat as those cut by the children with some vision, I think it is better for all the pupils in the

class to have had a share in the work than for us to have a superior notebook which was made by only a few students. With each of the states pasted within the book are some of the most interesting and important facts about that state.

The use of dramatics is excellent for teaching much of the subject matter we wish to present, but it seems to be especially well suited for teaching special phases of history. Through the dramatization of some specific historical event the children obtain a more vivid and realistic impression than they could receive through other means.

The sand table and modeling clay both have a place in the teaching of social studies. I am sure that the fourth grade in our school knows a great deal more about life on the desert now that they have completed their sand table "Oasis Village." Clay is an excellent material for giving totally blind children more accurate concepts of things as they actually are. Among other devices which help to make the teaching of the social studies pleasant and successful are interesting talks by outstanding visitors to the school, the keeping of travel diaries, learning the songs, dances, and games of the children of other lands, exhibits, pictures, good maps and globes.

These are only a few of the materials and methods which I have found helpful in teaching the social studies. I think we realize now, as never before, that those who teach the social studies should be able to contribute something worth while toward the betterment of the world. With scientists, educators, and others of our world workers contributing to improved methods and materials, it is surely up to us to make our social studies program interesting, practical, and challenging.

SOCIAL STUDIES ON THE HIGH SCHOOL LEVEL

T. E. STOUGH
Principal, North Carolina State School for the Blind

Social studies, on the high school level, include those materials in the curriculum which are drawn from the fields of history, geography, economics, civics, and sociology and are practically the only subjects in high school that give the kind of training which we all have to apply in all of our later relations with human society. Since this is true, we cannot over-emphasize the importance of seeing to it that an adequate social studies program is provided for our high school youth.

The guiding principle of this paper is found in the following paragraph from **Cardinal Principles of Secondary Education:**[1] "Education in a democracy, both within and without the school, should develop in each individual the knowledge, ideals, interests, habits, and powers whereby he will find his place and use that place to shape both himself and society to ever nobler ends." These are minimum goals and are within reach of all boys and girls who are provided with good materials and good teachers.

Since in reality there is no one method in teaching any subject, and this is particularly true in teaching the social studies in a school for the blind, this paper will not be too much concerned with the method used.

The social studies require more supplementary reading than other subjects and pupils should be encouraged to read not only general works but also the actual primary source materials wherever they can be obtained in Braille. I am aware of the fact that one immediately runs into difficulty in applying this in a specific teaching situation in a school for the blind in that the nature of the Braille reading process is so slow that the student can generally cover little more than the daily textbook

[1] **Beard, Charles A., A Charter for the Social Studies in the Schools.** Charles Scribner's Sons, New York. 1931.

assignment. Generous use should be made of material recorded on Talking Books, particularly periodical literature. It is also imperative, then, that the teacher read and summarize a vast amount of supplementary material for the students, for it goes without saying that unless there is an interest, there will be very little permanent learning.

Constructive teaching calls for well planned lessons, well organized teaching units, and a lively presentation of material. In studying from Braille, much time is consumed in looking back for a particular item. A seeing student may underline a phrase or a clause in a paragraph, which upon looking back, will enable him to recall the subject matter at a glance; whereas the blind child will be forced to thumb through many pages before he finds what he is seeking. Much more oral explanation is necessary, therefore, in teaching the blind. The teacher should be reminded here that she will get from her students only what she demands. If less than the best is acceptable, that is all one will receive from those who are capable of producing more. The teacher should not be intolerant, but he owes it to the pupils to compel them to work to capacity. The student must never feel that he is going to get by with anything less than his best.

The first year of high school should include a good course in citizenship or community civics, because the student will have more and more opportunity to practice individual and group decisions. Our boys and girls will never grasp the full significance of the American heritage unless the administration of the school can give the pupils an opportunity to take an active part in their school life. The social attitude, the American attitude, should, of course, be the special aim of the social studies teacher; it should be more—it should be the aim of the school, it should be one of the characteristics of American schools. Fair play, tolerance, service, and individual cooperation are ideals to be emphasized and developed because community civics deals with the relation of groups to each other. It helps youth to know the community, what it does for them, and what they may do for it. Students should sit in on meetings of the city council, county commissioners, school board, and sessions of both city and county courts. Too much cannot be done here to acquaint students with the responsibilities of these groups. They should attend P.T.A. meetings, luncheon meetings of civic groups, and political rallies wherever possible. At least six weeks should be spent on occupational information and guidance. This will be a good time to offer the students guidance in choosing their future high school courses. The students should begin here the development of their abilities to participate skillfully in cooperative undertakings.

The second year in high school should offer the students an opportunity to study world history. The course should lead students to understand the historical background of present world problems, and there are many of them; it should help them to see more clearly America's role in world affairs. This has become increasingly important as the interchange of trade and communication between nations has increased. I should like to indicate four or five areas of knowledge which this course should explore: (1) Early Civilizations and their contributions, (2) Medieval Europe and the Church Influence, (3) The Industrial Revolution and the machine age, (4) The rise and development of democracy, and (4) World Wars and Nationalism.

Physical geography is frequently grouped with the social sciences, particularly in early high school, although sometimes it is classified with the pure sciences. There is no argument, however, about the worthwhileness of the subject to high school students. It would seem that the major emphasis should be placed upon the "influence of geographical environment upon man's mode of living, and upon his major activities."

Commercial and industrial geography are to be made a part of the course and the teacher must be careful to make the tie-in when the opportunity arises. R. H. Whitback stresses the importance of this procedure when he says: "Until a few

years ago the geography of the secondary school was either physical geography or commercial geography; but to thus separate the two is to rob each of its complement. If the large facts of economic geography are not traced back to the physical causes upon which, in a degree at least, they rest; and if the facts of physical geography are not carried forward to some of the great human consequences which arise from them, then each falls short of its possibilities. Geography is not simply a study of the physical environment of man, nor is it merely a study of selected human activities; rather it is a study of both plus their interrelation."[2]

In teaching physical geography, the problem or project method may be used to considerable extent. The same teaching skill should be used as that which characterizes good teaching in other subjects. Most of the laboratory work should be in the field. To make field trips mean the most to the student in terms of training and knowledge, it will be necessary for the teacher to plan such trips with the greatest of care and exactness. The teacher should be thoroughly familiar with the area into which the field trips will take the students, and she should have covered every foot of the ground before taking the students. Such preparation will save time for both the teacher and students and will make possible maximum teaching values. Space should be provided in the school for the display of field-trip collections.

American history should start at the beginning of our history and trace our development until the present time, with special emphasis upon our growth since the civil war. Since the chief motive of our study in this field is a civic one, it would seem that the major emphasis should be upon American ideals and institutions. We must be positive in our instructions at this point and teach respect and enthusiasm for the foundation of our democracy. We must teach the safeguards of our liberty which are: representative government, trial by jury, freedom of speech, press, religion, and public assembly, the right of protest, the rights guaranteed by our Constitution. The framework of our history has already been taught and it is here that we should give the soul to the framework by teaching the spirit of American history.

Using basal and supplementary text as reference books, the teacher should adapt the course to suit the needs and interests of the pupils. In assigning supplementary materials, the teacher must have in mind constantly that reading Braille is a much slower process than reading inkprint. Some teachers will prefer to teach the course through large units of development of trends or topics without particular regard for a chronological order or arrangement, in which case the following units might be suggested: (1) Discovery and first European settlements in America, (2) Separation from England and a written constitution setting forth the framework of our government, (3) The growth of nationalism and the rise of democracy, (4) A half century of growth, 1865-1914, (5) The United States as a world power, and (6) Prosperity and economic experimentation, 1915-1940.

Pupils should be encouraged to listen regularly to radio commentators of generally recognized ability. The "American Town Meeting of the Air" and the "University of Chicago Round Table" afford good examples of adult discussions of modern problems. Current magazines and newspapers are indispensable to the teaching of American history.

In the twelfth grade or last year in high school there should be a course in general sociology. The social sciences have served their apprenticeship and have now reached a stage where they are slowly but surely developing into a very definite science of human relations. The youngest of the social sciences is sociology. Social problems cannot be successfully treated apart from history, civics, economics, and geography; therefore, wherever possible an attempt must be made to correlate the treatment of the social problems with the subject matter of these fields. Since most of our social order is normal, though many would not agree that this is true, sociology, on

2 Course of Study for the High Schools of North Carolina. Educational Publication, Number 147, p. 136.

the high school level, needs to be more than a slumming expedition. It should give the student a normal view of society, a view that will help the student to see not only change, but order and stability and unity. They should see more than the grievous problems that vex and aggravate our society and too often make the headlines of our daily papers and magazines. They should be given insight into the living, growing, working normal system which makes up our society. Sociology must not face the high school student with either a world so transitory, fleeting, and disorganized that he feels that nothing is stable, or a world so hopelessly filled with problems that he feels morose and despondent. Rather, it can bring him face to face with the challenge of a permanent, wholesome social order in which he is to live and work joyously.

The teacher of sociology should take advantage of the keen interest of high school boys and girls in current happenings. The group should visit the welfare department, both county and city, divorce courts, juvenile courts, criminal courts, family service agencies, industrial plants, and industrial communities. At least one Monday morning in each month should be spent in police court. One or more trips should be made to hospitals for the mentally diseased, the state or federal prison, institutions for wayward boys and girls, and other special schools. The group should visit public schools; city parks and playgrounds should be evaluated in terms of their adequacy and services to boys, girls, and adults. The head of some family service agency should be invited to talk to the students on marriage. Political meetings in public parks and assembly halls furnish a splendid opportunity for students to see and hear a cross section of American life. Effective citizenship in a land of free speech, free press, and free assembly, whether in open parks or assembly halls, demands, among other things, the ability to recognize propaganda and to deal with it in such a manner that its crafty effects are avoided without the destruction of our hard won rights and privileges. Discriminate reading and critical thinking should be the heritage of every student as he goes out to face this world of propaganda.

The teacher should select a method or combination of methods which will contribute most to the effectiveness of learning. Each teacher develops certain techniques and classroom procedures which he uses as tools. Included among these are supervised study, discussion, socialized recitation, teaching unit plan, dramatization. No class period can produce adequate results unless it demands some contribution from every student each time the class meets. Faulty preparation is sure to follow every class meeting that does not make a definite demand of every student. Constant, fresh preparation on the part of the student and teacher is necessary, if the social studies program is to do all it can to bring about a better world in which to live.

SOCIAL STUDIES

W. CRABIN GILL
Principal, Louisiana School for the Blind

To clarify procedure and to make for more effective handling of this sectional meeting, your chairman has divided the subject into three parts:

A. The Social Studies—Elementary Grades
Miss Ila Parent, grade teacher at the Louisiana State School for the Blind.

B. The Social Studies—High School Level
Mr. T. E. Stough, Principal of the North Carolina School for the Blind.

C. The Social Studies—In General
Mr. W. Crabin Gill, Principal of the Louisiana State School for the Blind.

Purpose of this paper.

It is the purpose of this paper to present as briefly as the extent and the importance

of the subject justify, certain important findings from various authors, on the **nature, the history, the divisions, the aims and claims, the core, validation of materials, present status, and recent trends and needs,** in the subjects classified as the social studies.

Nature of the social studies.

By the social studies, we mean those courses which treat of organized society—its development, organization, functions, activities, and ideals as related to man as a member of that society.

Brief history of the social studies.

The teaching of history and geography in the Colonial Period seems to have been the exception rather than the rule and when offered they were very limited in content. History, like English, had very little recognition in the Latin Grammar School. However, it early appeared in the academy and the high school course of study. Geography, too, found a place in these two types of schools but it was soon depressed to the elementary level. In the publication called the "Academician," we find geography listed among the offerings as early as 1818. Monroe and Weber state that history began to be recognized as a regular subject as early as 1821 in the first high school. From the same source of information we found that history was required by law in Massachusetts in 1827, to be taught in the high schools of that state. By 1847 it was required for entrance at both Harvard and Michigan Universities. Thus by 1870 we find history was required by most of the high schools and academies of the country. Geography was a prerequisite at Harvard as early as 1807, at Princeton by 1819, at Columbia by 1821, and at Yale by 1822.

Toward the middle of the nineteenth century to a number of courses in history were added studies in "Political Economy" and the Constitution of the United States, but this development was very gradual until after the report of the Committee of Ten in 1893. The content of the histories up to 1900 emphasized the military, political and dynastic type or phases of history. After that date (1900) the emphasis is toward the social, economic, and vocational aspects. Between 1900 and about 1915 there was a rapid expansion in the number of separate courses in history, ancient, medieval, modern, English, and American. Then, in more rapid order came the non-historical subjects—economics, civil government, sociology, community, vocational and economic civics, and problems in American democracy.

Since then we have witnessed the development of fusion courses in social science introduced on the Junior High School level. This rapid expansion is the reflection of but one thing and that is the growing recognition of the need and value of the social studies when compared with some of the other courses found in the High School curriculum. Thus, we find them occupying a place second only to English in the offerings, a place ahead of mathematics, science, and foreign languages. As a result we find that in a few schools they are becoming the center, **the core,** around which other subjects are being built and as far as possible other subjects are being integrated with the social studies.

We are now witnessing a scientific study into the validity of **aims, materials of instruction,** and **activities,** to see whether they are in accordance with the actual needs of the individual and the needs of society.

The divisions or subjects classified under social studies.

Inasmuch as the divisions have been very fully indicated in the history, it will only be necessary to list them in catalog form here. They are:

A. History
    1. Ancient
    2. Medieval and Modern
    3. English
    4. American
    5. World
B. Geography
C. Political Economy
D. Civil Government
E. Sociology

F. Civics
   1. Community
   2. Vocational
   3. Economics
G. Problems of American Democracy
H. General or Fusion Courses
I. Current Events

A few schools offer Sociology, Psychology, and Anthropology.

The aims of the social studies.

Aims are of two types—**General** and **Specific.** As the term implies the general aims are the more inclusive and we find that each of the separate levels—**primary, elementary,** and **secondary**—has its specific goals or aims. Likewise each subject has its specific objectives.

Mr. Koos in his book "The American Secondary School" says, in part, "The largest single aim is the **civic—social—moral** aim.

1. To promote good citizenship
2. To develop a spirit of loyal nationalism
3. To develop a spirit of world citizenship."

His statement on the Psychological Aim mentioned one point that seems pertinent for us, "To cultivate the reconstructive imagination—through History by the extension of one's self into time; through Geography by the extension of one's self into space."

History, as a subject, has passed through at least three phases or stages of claims for its inclusion in the curriculum:

1. In its early appearance it was offered as ancillary to a study of the classics.
2. Later for an informational subject.
3. Still later for its supposed disciplinary value.
4. And now for its sociological value with special emphasis on present day living.

If the social studies program develops in our boys and girls those common understandings, ideas, and ideals of a democratic society so necessary to SOCIAL SOLIDARITY in any group, then this alone is justification enough for their being included in our program. And if we include in the above something beyond mere NARROW NATIONAL PATRIOTISM that much broader sense of SOCIAL LOYALTY which can lead to better feeling between nations, we have fully justified their place in our school program.

Many of the activities of man are conducted through social institutions such as the home, the school, the church, clubs, one's work, the state, or the nation. Some knowledge of how these institutions developed, their ideas and goals, can be taught through the various fields in the social studies group. This objective seems to be a worthy one.

Any statement of aims worthy of the name should consider three factors:

1. The learner (child) and how learning takes place.
2. The society of which he (the child) is a part. Ours is a democratic society, or we profess it to be.
3. The broad purpose of education.

In the light of these three controlling factors, let us weigh carefully some more recent important statements of aims:

First, the expression of the Educational Policies Commission as found on pages 45-48 of its "Purposes of Education in American Democracy."

1. The development of the individual in respect to his use of the fundamental tools of learning, health, recreation, and his personal philosophy;
2. The improvement of human relationships in the home, family, and community;
3. The promotion of the economic efficiency of the individual as a producer, a consumer, and an investor;
4. The promotion of civic responsibility involving the individual's dealings with his government—local, state, and national and his relationships with the peoples of other nations.

Second, we have a splendid statement by John Dewey when he said, "The desire to work with others, for mutual advantage,

must be made the controlling factor in school administration and instruction. Instead of imbuing individuals with the idea that the goal is to sharpen their powers so they can get on personally, they must be trained in capacity for intelligent organization so they can unite with others in a common struggle against poverty, disease, ignorance, credulity, and low standards of appreciation and enjoyment. Democracy will be a farce unless individuals are trained to think for themselves, to judge independently, to be critical, to be able to detect subtle propaganda and the motives which inspire it. The motto must be—learn to act with and for others while you learn to think and judge for yourself."

Third, an expression by the Advisory Commission on Post-War Policy representing the National Council for the Social Studies in their 1944 report entitled, "Social Studies Look Beyond the War." They outlined the following areas to be stressed:

1. Since modern warfare can destroy civilization and democracy, its costs and dangers should be considered.
2. International organization and cooperation must be considered as the only practical approaches to peace, security, and well-being.
3. Racial, religious, ethnic, and social-economic tensions must be reduced through understanding, unity, and respect for individual personality.
4. Democracy must be emphasized as a system of government, a way of life, and a set of principles for living and learning together in the schools.
5. Closer relationships with the community are essential to the vitality of the school program in civic education.
6. The social studies program should afford opportunities for individual growth and adjustment.
7. Domestic problems, economic in their nature, need intensified consideration.
8. Effective consumer education is essential in an economy in which all face problems as consumers.
9. Attention should be given to geographical relationships which have changed and grown in importance.
10. Americans need to understand the history and civilization of other peoples.
11. The history, ideals, achievements, and world relationships of the United States should be given greater emphasis in the program of civic education.
12. The social studies should be concerned with current affairs and the processes of molding public opinion.

It is obvious that much time has been devoted to the item of aims, and quite justly so, for two very good reasons: first, there are several excellent opinions expressed on aims; second, because the writer regards aims as most important for if they are worth while they should be followed relentlessly. If they are not sound or good the further one pursues them the further one is from a desired end result.

The Core.

It is difficult to find any author who is willing to commit himself unreservedly to any one plan or system. This is not difficult to understand in view of the constant reorganization of studies which has characterized the latter nineteenth and early twentieth centuries.

In Louisiana only two courses are required for a high school diploma. They are civics (local and national) and American history. Civics coming in the tenth grade and American history in the eleventh or twelfth. All others are elective.

The recommendations of the Commission on the Social Studies seem significant. They do not even speak of the offerings in terms of subjects but rather in terms of significant phases or functions in life. To quote, " . . . the social sciences should begin in the earliest years, not with some people remote in time and space, and cultural development, but with the life and institutions of the surrounding community —the simple social relationships of the family and the neighborhood and the means of providing food, clothing, shelter, medical care, education, cultural opportunities, recreation, and security of person." Throughout this elementary level

it is understood that activities for actual participation in life-like situations of his group will be amply provided for on the child's level.

On the secondary level the theme would be the development of mankind and the evolution of human culture with emphasis on the present and on American civilization. This program might culminate in the study of regional geography, of comparative economics, government and cultural sociology, of the major movements in the social thought and action in the modern world on the national and international stages. There would be attention given to the reading of newspapers and magazines, to methods and instruments of inquiry, historical criticism, analysis, verification and authentic sources.

Validation.

On the validation of the materials of instruction the same Committee report offers five criteria for those who would select and organize materials of instruction for the social studies. They are:

1. The aims and purposes of education.
2. The powers of the child.
3. The time allotment of the school.
4. The life of the surrounding community.
5. The obligations associated with professional competence.

Present Status.

Since present status represents rather a progressive evolution and change over a period of years instead of a static condition as the name (present status) might erroneously lead one to think, I shall let one run naturally into the other as actually occurs in the case of the development of the social studies. The clearest presentation of this development is found in the report of the Federal Office of Education on the High School Level, giving the per cent of enrollment of high school pupils taking history between the years of 1890-1928. The findings:

1. 1890—27.3%
2. 1900—38.2% (11.1% increase).
3. 1910—55% (16.8% increase).
4. 1922—50.7% (4.3% decrease, new non-history courses).
5. 1928—46.5% (4.2% decrease, new non-history courses introduced into the curriculum).

Status of non-historical subjects:

1. 1900—21.7% enrolled in civil government.
2. 1910—15.6% (6.1% decrease).
3. 1922—26.5% (enrolled in all social studies.)
4. 1928—46.5% (a marked rise in the total enrollment of all social studies).

An entirely different slant on the present status was revealed in the Dawson report of 1923. From the reports of 2,404 schools on offerings and grade placement of social studies Dawson finds the following conditions:

1. Great confusion in offerings resulting from
2. About one-third of the schools being influenced by the report and recommendations of the Committee of Seven 1899, requiring four full years of history. Offered thus:
   A. Ancient—emphasis on Greek and Roman
   B. Medieval and Modern European
   C. English History
   D. American History and Civil Government
3. Another one-third of the schools was influenced by the recommendations of the Committee on Reorganization of Secondary Education for the Social Studies, 1916, recommending two cycles thus:
   A. JUNIOR CYCLE
      Geography
      European History
      American History
      Civics
   B. SENIOR CYCLE
      European History
      American History
      Problems of Democracy—sociological, economic, and political.

4. Still another one-third of the schools was floundering about without chart or compass.
5. Ancient, Medieval, and English History rapidly losing place.
6. Some headway in one-year World History course.

Since the above report came out World History has gained still more headway. While all other histories, except American History, have lost ground.

We are brought up to date on our "present status" of the social studies and are given considerable insight into trends when we read the report of the Sixteenth Yearbook of the National Council for the Social Studies published in 1945. To summarize briefly, and only in part, it was found that:

1. Social Studies classes all over the country are being used to improve **human relationships.**
2. The studies **vary** greatly as to **content** and as to **organization.**
3. Several approaches being used—
   (a) The incidental approach which utilizes the inspiration of the moment or some matter of specific, immediate interest as a point of departure.
   (b) The **pervasive emphasis** throughout all the social studies program provides an approach that places **human relationships** in the common stream of all social studies teaching.
   (c) Specific units focusing attention on significant topics, issues and problems.

These approaches are not unrelated and often were used in combination. The term "UNIT" was used in describing each type above mentioned.

   (d) The vehicle most used today for teaching the social studies is still the **highly organized subject matter unit.**

Practices in the Elementary Grades.

1. In the elementary grades the pervasive approach is desirable. The chief purpose at this level is to develop good human relationships by meeting prejudices before they ever begin. Little folks are fairly free from such before they contact too many of us older ones.
2. Stress **similarities not differences** at the early levels—through grade four.
3. People close to the lives of the children should be chosen for study.
4. The common brotherhood of man comes from teaching similarities as well as differences among peoples of the earth.
5. We may introduce differences at about the fifth or sixth grade. Stress the fact that different doesn't always imply queer or inferior.
6. Geography and history afford opportunities to teach the interdependence of all life and peoples.
7. Through geography stress that people are what they are partly as a result of geographical factors.
8. Science has brought about improved transportation and communication, thus bringing all peoples closer to each other.
9. Trend toward teaching **large units** or significant phases and functions in place of memorization of isolated facts—rivers, countries, dates, etc.

Practices on the Secondary Level.

1. We should go far beyond the elementary child in **concepts, activities,** and **materials.**
2. Much sharper division in content and in methods on the secondary level.

Dr. Swindler, in his book, "Social Studies Instruction," summarizes the Present Day Trends in a very helpful and clear fashion. These are as follows:

1. Better, more accurate, and less biased textbooks and references; also less sectionalism.

2. Emphasis on social and economic phases of history instead of the old political, military, and dynastic phases.
3. The setting up of definite goals or objectives—general and specific.
4. The wider use of library materials and the use of laboratory methods to help enrich the courses and to help provide for individual differences.
5. Individual assignment sheets, graduated assignments, and directed study period, as means of individualizing instruction.
6. Scientific and objective tests or evaluation with some provision for remedial teaching.
7. More emphasis on modern and American history and less on Ancient and English history; more emphasis on community and vocational civics and less on pure mechanics of government, constitution and laws.
8. Differentiation in subject matter and methods between the Junior and Senior high school levels to suit early and later adolescence.
9. The growth of unit or fusion courses on the Junior high school level.
10. Activity units in preference to subject matter units to bring out actual life situations.

Needs—and Conclusion.

Our first and fundamental need is to recognize that we **do have needs!** Not the least of which is to **keep open minds,** so that we may not close the door to all betterment. Educators—administrators, supervisors, principals, and teachers, need to formulate an adequate **philosophy of education.** We need to view the **function** of the school as being much broader than the mere imparting of subjects to the child—arithmetic, geography, language, etc. We need to think more of what is happening **inside the child.**

We need to understand the nature of growth and how learning takes place. We need to view the child not just as a primary, elementary, or secondary pupil but as a **changing organism** who will not be the same personality tomorrow, nor two to four years from now. Growth comes through **experiencing** and through experiencing behavior is **modified** and **learning** is going on **constantly.** Each new experience is conditioning his **inner self** which in turn will affect all **future conduct** in accordance with **how he thinks** and **feels** toward the physical world and social world about him.

Thus, we see that through guidance we must direct activities in such a manner as to produce a child who will react in a socially desirable way. It isn't enough to teach or preach **true** from **false, good** from **bad,** and **desirable** from **undesirable.** The child must have a feeling of like for one and distaste for the other to such a degree that he will seek the one and avoid the other. We want to condition the child so that he will pursue desirable patterns of behavior because he believes in it, because it is a part of his very make-up from his earliest training.

Doesn't it follow then that the school must provide in its program real experiences related to the basic functions of life —self preservation and racial preservation? Doesn't it also follow that the mere "poring-in" process through purely subject matter units is not enough? Actual participation in life-like situations must be provided whereby the child learns to choose between **honesty** and its **opposite, tolerance** and its **opposite, democratic living** and its **opposite, Godliness** and its **opposite.** Not just because some authority above him says so but because his own experience says so. Likewise he will appreciate the interdependence of all life by actually sharing in the **responsibilities** as well as the **benefits** of his group, be the group small or large. The **sharing** is the important thing for him to get!

I am aware that many of us are a part of a system statewide or otherwise wherein the program of studies is prescribed for us, and therefore have little choice in the offerings of our school. What we can do is to determine, in the light of the best information available, where the emphasis should be placed and see to it that all

learning that goes on under our direction shall be in accordance with the real needs of the child and of society.

With the echoes of Nagasaki and Hiroshima ringing freshly in our ears who could doubt that science has way outrun man's ability to get along with man? The experiences, domestic and international, since peace was declared, but serve to strengthen our conviction that not science but human relations has been our lag!

This brings us to the main reason for preparing this paper. Wherein lies our greatest educational need for emphasis? It lies in the province of those studies which deal with man in his relationships with man and society. These are the subjects classified in our curriculum as the social studies.

As educators, let us have the vision and the courage to put into practice that which we conceive to be right and best for humankind just as far as our positions will permit.

These are just a few needs that occur to me. I sincerely hope that this paper may stimulate some of you to add other needs and that from my efforts you may receive incentive to do a better job of teaching the social studies in your own school.

This paper makes no pretext at being original. In addition to authorities already acknowledged in the presentation above, the following have influenced the ideas expressed:

Koos—The American Secondary School
Inglis—Principles of Secondary Education
Monroe and Weber—The High School
Lane—The Progressive Elementary School
Lee and Lee—The Child and His Curriculum
John Dewey—Experience and Education

The only claim to originality will be in the manner of its organization and presentation.

REPORT OF SECTIONAL MEETING, WEDNESDAY, JUNE 26

Social Studies

Chairman for next biennium—Mr. George Cantin, Mississippi School for the Blind.

Secretary—Harry J. Higgins, Oklahoma School for the Blind.

ADMINISTRATIVE PROBLEMS IN A DEPARTMENT FOR THE PARTIALLY SEEING IN A SCHOOL FOR THE BLIND

GEORGIE LEE ABEL
Principal, Iowa School for the Blind

Introduction

There is no attempt in this discussion to justify having classes for partially seeing children in a school for the blind. If the public schools of our nation were adequately meeting this need, we would have no problem in regard to this group of partially seeing children. In the state of Iowa we are attempting to solve a problem which has been evident for some time. We are proud enough of the results of the program to recommend them to those of you who are no doubt realizing that something of the same nature should be done in your states. In a rural state such as ours it would be almost impossible to furnish an adequate program for all the boys and girls in the many small school systems.

The very nature and expense of the program would make it almost prohibitive in most of these schools. We are, therefore, trying to be realistic. Instead of spending so much time discussing where the program should be offered, we are trying to use our facilities to the best interest of the partially seeing boys and girls in the state. Our school is also working closely with our state department as it proceeds to serve more children throughout the state who need special care and education because of a visual handicap.

An Informed Administrator

In considering the outstanding problems in the administration of these classes, the first attention is called to the administrator himself. In setting up a program he should first study all the available material. He could consult with foremost authorities in the country by actually visiting many of the best school systems, and he should make every effort possible to secure the best teachers to carry out the program. He can do no better than to appeal to the National Society for the Prevention of Blindness for his first guidance. This organization has done an excellent job in publishing very worth while material, in carrying on valuable research, and in making recommendations which are practical and helpful. Mrs. Hathaway's very excellent book is certainly a must on the reading list for anyone who would study this program and follow the suggestions and recommendations.

Location and Facilities of Classroom

Consideration in the program for the best location of the classroom and the proper facilities and equipment should consume time and careful thought on the part of the administrator. Much information along these lines can be gained from the above-mentioned source. There is just no excuse for making mistakes in setting up a program when adequate information might have prevented such mistakes. There are still many unanswered questions about methods of procedure, eye conditions and the like; but there is no reason for guess work concerning these physical features of the program. There may be differences of opinion, but there is sufficient experimentation and knowledge to enable an administrator to set up his classrooms with a great degree of certainty. The person in charge of the program is not only responsible for the selection of the materials, but for adequate up-keep and for careful consideration in replacements. For example, walls must be kept cleaner and repainted more often than is true of a regular classroom, in order that the best light reflection may be possible. Much more janitorial care of lights and windows has to be considered in this specialized program. The superintendent may leave to the judgment of his well-trained teacher many of the details of the physical appearance of the classroom, but the more that he knows about it, the surer he and his staff are of a program that is constantly growing and improving.

Eye Care and General Health

Of prime importance is the most technical phase of the subject. This is the eye care and general health of the children placed in these special classes. In our school, the placement of a child in one of these classes is absolutely the decision of our ophthalmologist. Twice each year our ophthalmologist from the State University Hospital conducts a clinic at the school. Many times he brings other members of his staff with him. At this time, the superintendent, the principal, and the teacher from each of the three classes of partially seeing children, sit in with the doctor. As each child appears before the doctor, there is an opportunity for questions either about eye conditions, glasses, or chances for future improvement. There is a brief period for discussion or questioning after the child is gone, in the event the discussion or questioning should not be done in the child's presence. After all of the students have been seen, there is still another period for questions on the part of the teachers.

Out of one of these clinics came a very worth while suggestion from the doctor, which was that any person with a small

amount of training could adjust the frames of the glasses which the smaller children are continually getting bent or out of line. One of our teachers was sufficiently interested to go to the optical company at the University, the right tools were purchased, and we are sure, as a consequence of this project, that a number of the children enjoyed frames that were more comfortable. In this way also many misfits in glasses, which had been fitted away from the school, were detected and referred to the hospital. Time does not permit the relating of other helpful experiences, but we are sure that we will continue to benefit from this type of help from our state hospital. At the close of each clinic there is a list compiled of those students who are to be taken to the University Hospital for a more thorough check, or possibly for operative care. This goes on summer and winter.

Selection of the Teacher

A word must be said about the selection of the teacher, even though it will probably be discussed more adequately in another part of the program. We have realized, as all of you have realized, that it is imperative to have a teacher not only with an excellent educational background, but also with special training for this type of work. Even if the school must pay for this training, it must be done. One might even go so far as to say that perhaps the program should never be begun without the necessary facilities and certainly the carefully selected and well-trained teacher.

Leisure Time and Outside Study

A problem which is peculiar to a school for the blind is the actual control over the use of the eyes during the hours spent outside of school. It is an administrative problem to see that rooms are well lighted for recreation, and that separate study rooms are provided, apart from the study rooms for the blind and partially blind children. The matrons and supervisors of the respective dormitories also should have some in-service training in what to observe, the value of eye rest periods, and the nature of the work which is to be done. The teachers are most helpful in cooperating with supervisors for the provision for these hours.

Mental Hygiene

The proper mental hygiene for these students is of great concern to the alert administrator and his staff. These children often have serious difficulties with their seeing friends who wonder just how much they see and just how much help they need. Many times even the partially blind child gives the impression of having better vision than is actually true of the partially seeing child. His field of vision may be more limited, or he may be seriously affected by the change in lighting of various rooms, due to the very nature of his eye condition. The teacher or administrator familiar with these problems can often help him make the necessary adjustments. Many times a change of attitude is a great help, or better still, a much improved sense of humor, or a more patient philosophy with others who really want to be helpful.

Recreation for these children must be done easily and naturally for a better outlook on life, and by learning to do well many of the social activities they can make a much better adjustment when with those who are not as likely to understand the children. Some of the finest dividends which we can receive on our investment in this type of program come from parents who tell us how their children were ill at ease in the larger classes of the public school, and how they did not want to go out for scouting or any club activities, until they learned to enjoy them at our school. Many of these formerly timid children become leaders of clubs. They do not take these places from the blind or partially blind, either. We have carefully studied this program. You will be interested to know that out of the last ten valedictorians from our school, only two were partially seeing. We have had an equal number of leaders in the various organizations holding offices. We have also watched very carefully our part-time employment program to see that too much of the work does not go to the partially seeing, or vice versa. We try to give spe-

cial considerations purely on the basis of merit, and its seems to work out quite well.

Clear Type Materials

The problem of clear type material has been great since the beginning of the program. Indeed, it would seem that this factor is responsible for so many schools hesitating to take up the work. Since this problem will be discussed so very well by Mr. Ellis, it shall not be presented here, except to say that we shall look forward to better days along this line when the American Printing House will help us solve these problems as it has so well done in coming to the rescue with previous problems. We are in a position to appreciate the reward as we have been paying for much copying of material. Much of this material has to be rechecked each year as the second carbons get quite blurred. Naturally, there is much reading aloud to be arranged for in the high school. The Talking Book machine has been a great help. By the use of the head phones for eye-rest-periods reading, and for leisure-time reading, we have managed to supplement our English and Social Studies quite well. It makes for continuous planning and flexible schedule-making for these students.

In-Service Training for All Teachers

Professional growth for all teachers is very necessary in this newer program which has been added to the school for the blind. It is very important that every teacher on the staff understands the program and its purpose. They must feel the importance of knowing more about the eyes as well as their care and the best possible surroundings for those visually handicapped children who must work and play comfortably. Many popular books and articles have been written about the eyes, and when the administrator sees that they are available for the teachers to read, they are eager to take advantage of the opportunity. There are also many ophthalmologists who can talk the layman's language well enough to make it worth while to arrange for a discussion by a member of that profession; a discussion in which the teachers will be glad to participate. There is much need for educators and medical experts getting closer together in the solution of many of these problems, and the school must make this possible. We feel that we have started our work in this direction, though we realize that there is much to be done.

It is paramount that we stress in this program, as in all the rest of the work, at our schools, that every teacher must be informed. We have said for some time in regard to the Guidance Program that every teacher is a guidance person and is responsible for sound philosophy along this line. The same is true of the education for the partially seeing. The teacher must meet the needs of every individual in a "Triple" school, if you will; the children who may be blind, the children who may be partially blind, and the children who may be partially seeing.

GUIDING PRINCIPLES IN THE EDUCATION OF THE PARTIALLY-SEEING CHILD

C. EDITH KERBY
Associate in Program Planning and Research, National Society for the Prevention of Blindness

Education is a long term project having as its overall objective the optimum development of each individual. That objective is not attained unless or until each has reached the maximum of which he is capable in health or physical development and in personality, as well as in knowledge and mental development. This is true of the physically handicapped no less than of the so-called normal child. The only difference for the partially-seeing child is that we know in advance that he may never attain full 100% visual efficiency. However, it must be remembered

that his potential visual ability, though limited, is not entirely lacking.

The first principle in education of the partially-seeing child, therefore, is that his vision is an asset to be treasured, used and developed for his benefit, not a liability to be written off in advance as a total loss. This principle is fundamental but frequently neglected by many who accept responsibility for the education of the partially-seeing child (or adult). As a result they fail to give him the maximum training of which he is capable in the educational tool subjects requiring visual skills, such as reading, writing, and observation of his environment, or they mistakenly assume that they are providing a vocation or avocation which will be an eye rest, when they choose one which a totally blind person could do, only to find that the seeing person simply cannot avoid using his eyes in the process, though this slows him down and/or makes him uncomfortable. Examples of these two points are:

1. The case of an adolescent boy with borderline vision in a school for the blind, who in the classroom was a poor Braille reader (because he used his eyes), but had taught himself outside the classroom to read newspapers and magazines and even to copy the printed words (with all serifs on the letters) in his writing.
2. The case of the graduate of a sight-saving class, who had been referred for vocational training as a weaver. He reported he feared he would not be successful because he was slow and besides it made him dizzy.

The second basic principle in education of partially-seeing is related to the first. It is that, although vision is to be used and training in its use is essential, the process must be made easy to be successful. It is obvious that there is nothing whatever to be gained by making the process of seeing difficult. Hence, the imperative need for large type books, clear maps, illustrations, etc., as well as adequate lighting for the visual tasks. One must think of the ease and comfort of seeing when planning, not only for classroom activities in which visual processes are of primary importance, but at other times and places. (For example, whereas the totally blind child does not need light or visible markers on steps to get around quickly and safely, the partially-seeing child does need them. Also, the former is not disturbed by being made to face the light; the eyes of the partially-seeing child are irritated and function less efficiently if subjected to glare.)

The third principle in education of the partially-seeing child is again a corollary of the second. It is that, when the use of vision is not essential to the learning of a subject, other methods should be substituted. (e.g. It is doubtful whether facts of history or science are necessarily more easily acquired or retained if read rather than heard or demonstrated. If you doubt that just think of all the information you yourself have acquired via the radio.)

The fourth principle is another corollary. It is that school tasks should be alternated at frequent intervals to avoid tiring the eyes by prolonged use of them for the most difficult seeing tasks. Even if we have had positive assurance from the ophthalmologist that use of the eyes will not increase the defect, there is no need for using them to the point of fatigue.

Another principle, number five, is the adaptation of the methods of teaching to suit the visual abilities of the individual child. Eye defects vary, not only in degree, but in type. What one child can do easily another may not be able to do at all. (e.g. The child with retinitis pigmentosa sees poorly at night, while the child with albinism, or aniridia, needs protection from too much light.)

Principle number six also bears a close relationship to several already mentioned. It is that, if we would protect the eyes from further loss of vision, we must give due attention to factors other than the use of the eyes. More real harm can come: from permitting participation in dangerous activities (not only those in which the eyes may be exposed to penetrating injuries, but also seemingly harmless sports such as diving, wrestling and tumbling,

which are contraindicated for the high myopes who are prone to detachment of the retina); from failure to give attention to nutritional and/or medical needs, for the diabetics or syphilitics, for example; and above all from failure to keep the child under ophthalmological supervision and to arrange for the best corrective care possible.

Still another principle, number seven, relates to the guidance and preparation for vocations suited to the abilities and limitations of the individual. In this connection, it is well to remember that selection should be guided chiefly by aptitudes, with just enough attention to visual limitations to give assurance that the occupation is one in which he can expect to function efficiently and safely.

Of paramount importance in the educational process is principle number **eight**, which is that teachers of the visually handicapped must have had exceptional ability, training and experience as teachers, plus the specialized training in the understanding of the visually handicapped and methods of adapting the educational processes to their needs. The focus of attention should be the child, not the subject matter of the curriculum.

Principle **nine** points to the need for making available to the child those facilities and services which are not ordinarily to be found within the confines of the school system. Case work services of family or child welfare agencies, a psychiatric analysis in the child guidance clinic, aptitude testing and vocational counselling, to mention only a few of the community facilities which should be utilized.

Principle **ten** is in the nature of a summation of all those which have gone before it, but is nevertheless of sufficient importance to warrant special mention. It is that facilities and program should be built around the needs of the partially-seeing child (the individuals and the group); the child should not be forced to adjust to a set-up which is inadequate or unsuited to his needs. Wherever existing facilities offer only a partial solution of the problem of the visually handicapped (e.g. in a school for the blind) they should be accepted only as a temporary expedient to provide a period of intensive study and adjustment of the child or pending the development of his local school to the point where it is prepared to give him either special class facilities or the special materials and supervision which will enable him to carry on in the regular classroom.

The child's need for normal family and community relationships suggests principle **eleven** which is that, except where required for the benefit of the child, unnatural situations such as separation from home and institutional placement should be avoided.

One of the prime essentials for any child is, as you know, to be like others, not different. This fear of being different suggests another principle, number **twelve**, which is that segregation on the basis of his handicap, or unnecessary association with those who are more handicapped than himself should be avoided. Frequent association with the normal group is to be fostered, so that the handicapped child will feel accepted. Incidentally, another fear too often precipitates a psychological upheaval in the individual, since it constitutes confirmation of his worst fear—the threat of total blindness. The teaching of Braille methods even when the prognosis for maintaining vision is poor, should be postponed until the child has reached the point of readiness, i.e., when he is ready to admit that it would be a help to him.

In principle **thirteen** we stress the avoidance of overprotection. Pity and pampering are no help to a handicapped child. On the contrary, they add to his handicap by reducing his chances of becoming a self-reliant and responsible member of society.

Finally, another need of the visually handicapped (as of all individuals) is to succeed. This suggests principle **fourteen** which is that all of the elements of success lie **within** the individual. It is the job of the educator merely to show him how he may succeed by adjusting only those methods and media which would inhibit success and letting him feel that he is understood and appreciated at his true worth.

REPORT OF SECTIONAL MEETING, WEDNESDAY, JUNE 26

Sight Saving Classes

Chairman for the next biennium—Mrs. Elizabeth Carpenter
Missouri School for the Blind

A VISUAL DEFECT OF THE PREMATURELY BORN INFANT*

THEODORE L. TERRY, M.D.

Dr. T. L. Terry is ophthalmic surgeon and pathologist at The Massachusetts Eye and Ear Infirmary, Boston, and acting head of the Department of Ophthalmology, Harvard Medical School. He is also a member of The American Board of Ophthalmology, and the author of many articles on diseases of the eye.

The survival of a considerably larger number of infants born two months or more prematurely has been made possible during the last decade by improved methods of incubation. An eye disease formerly observed with extreme rarity in infants born at full term is now a rather common occurrence in these surviving premature infants. It is estimated that a minimum of 432 infants will be blinded by this disease yearly. This estimate is based on statistics compiled by the Children's Bureau of the U. S. Department of Labor on the annual survival rate of 3,600 extremely premature infants and on the frequency of 12 per cent of these infants developing the eye disease, as determined by S. H. Clifford, M.D., of the Boston Lying-In Hospital. It must be emphasized that an increment of blindness should occur as improvement in premature infant care leads to an even larger number of survivals.

Immediately after birth and up to time of hospital discharge, the immaturely developed eyes of these infants show no abnormalities. Between two and four months of age, the mothers become aware that the babies do not see. In three instances, the mothers were convinced that vision was present for a time.

The abnormal process appears to be based on an improper development of the eye, both usually being involved. When the eyes are first formed, the growth of the inner structure is rapid, requiring a temporary network of blood vessels. These vessels form an intricate system traversing the interior of the eyeball. The blood entering the back of the eye in the region of the optic nerve flows forward, nourishing the rapidly growing crystalline lens, and passes into veins in the front of the developing iris. As growth continues, the lens develops somewhat less rapidly, and the need for so rich a plexus of blood vessels in the eye lessens. As a permanent complex system of nourishment forms and begins to function, the vascular system becomes more simplified. This new nutriment, the aqueous humor, is a clear, colorless fluid, which filters from the blood vessels of the ciliary body. Were there no such substitution for the original nutritional system of the crystalline lens, making it necessary for even a simplified blood vessel net to be retained in the very center of the eye, vision would be considerably less acute. As the ciliary body develops further, this new system becomes more efficient, until it reaches a stage when it

* Read before Massachusetts Council for Organizations of the Blind, at Perkins Institution, May 26, 1945. Reprinted from the **Outlook for the Blind and The Teachers Forum**, Vol. 39, No. 8. Published by American Foundation for the Blind, Inc., 15 West 16th Street, New York 11, New York.

alone is sufficient to supply all the nourishment needed by the crystalline lens. Thus, the original net of blood vessels in the eye undergoes disuse, finally disappearing some two weeks before normal time for birth. Infants born more than two weeks too soon have this temporary blood vessel system present and it is easily seen as long as it is present. The blood vessels disappear while the patient is still at the hospital and, in most instances, the infants develop normal, sound eyes. In one out of eight of the extremely premature infants, however, there is a growth of opaque, white tissue of a fibrous nature located on the back of the crystalline lens within the meshes of the closed blood vessel net before it has a chance to disintegrate. With its development, the blood vessel system which had formerly appeared to close, reopens and carries blood again. This opaque tissue, forming a curtain behind the crystalline lens, usually completely screening the back portion of the eye from the front, reduces vision by preventing the light rays from reaching the retina. As the aqueous humor does not form in a normal amount, the growth of the eye is retarded, or ceases completely, and one observes a shallow, or completely absent, anterior chamber.

The iris develops improperly, retaining the blue color characteristic of the new born baby. The eyes, being unable to see clearly, have no incentive to fix steadily on any object and thus usually wander in jerking, irregular, searching movements. Fibrillae developing in the vitreous humor of these eyes gain attachment to the retina; and, after their formation, even slight growth of the eye will produce folds and separation and other abnormalities of the retina. Complications may arise, such as glaucoma, adhesions of the iris to the crystalline lens, and opacity of the lens and the cornea. Destructive hemorrhages sometimes spontaneously occur within the eye. The opaque tissue is developed to a variable extent, thus there are varying degrees to which vision is reduced. Growth of the eye, development of a normally deep anterior chamber, and the development of a normal iris color all appear to indicate a less unfavorable condition.

The temporary vascular structure through the interior of the developing eye is called the vascular tunic of the eye, or **tunica vasculosa lentis.** Until these recent studies were made, this disease process was called **persistent tunica vasculosa lentis.** However, the disease process is so much more than simply a persistence of blood vessels that this original name is a very faulty one. **Retrolental fibroplasia** has been suggested as a more fitting name, as it means **a growth of abnormal fibrous tissue behind the crystalline lens.**

It is essential that the cause be known precisely in order that the most efficient measures for the prevention and for the treatment can be ascertained. The possible causes can be classified first into those abnormalities which would originate from the parents, before the child is born. They are: heredity; toxemia related to pregnancy, or illnesses during pregnancy; blood incompatibilities between the mother and unborn infant; the use of new medication not previously available; and the processes which produce the premature birth. Of these possible factors, heredity can be ruled out. None of these factors, by their presence or absence, are associated consistently with the development of retrolental fibroplasia. In fact, either one or both of twins subjected to identical premature environment may have the disease. However, further work in these channels is being continued.

The second group is related to disturbances in the premature infant after birth. These infants are put "on their own" before all organs of the body can work efficiently. They cannot keep themselves warm enough, thus necessitating an elaborate incubator. The infants' temperature is maintained, through necessity, some 2 or 3 degrees Fahrenheit below normal body temperature. Using a higher incubator temperature is to court disaster. This temperature difference must be considered as an important possible cause. The incompletely developed glands of internal secretion cannot be expected to replace adequately the secretion normally supplied to the unborn infant by the moth-

er's thyroid, pituitary, adrenal glands, and ovaries. The lungs are not fully ready for their task, as shown in many instances by the necessity of administering pure oxygen. Blood pressure is increased. The poorly developed digestive system cannot efficiently absorb fats; consequently, fat-soluble vitamins, especially Vitamin A, are not utilized. Lack of Vitamin A in pregnant swine and rats has produced a disease in the eyes of their offspring not unlike retrolental fibroplasia, but occurring at a much earlier stage of development. The lack of Vitamin C in the guinea pig prevents the reformation of aqueous humor once it has been withdrawn. Failure to form aqueous humor in the premature infant could easily produce retrolental fibroplasia. Premature birth transfers the infant from the darkness of the uterus, where it is submerged in fluid, into a medium of air and light. Exposure to light is the one obvious change to which the eyes should be most susceptible. Yet, attempting to raise a premature infant in darkness, or even to cover the eyes, is hazardous to life itself because these delicate infants must be watched critically for evidence of cyanosis. Thus, one can summarize briefly many alterations of physiology revolutionary enough to produce abnormalities in the developing eyes.

The observation that the disease appears to be more frequent in one locality than another, and perhaps more frequent in one hospital than another, leads to scrutiny of the variation in technique in caring for infants born prematurely in various institutions.

As a study of all available details concerning the disease process itself, as well as of the infants and mothers, does not solve the problem, attempts have been made to produce retrolental fibroplasia in various types of animals which have unusually immature eyes at birth, such as the rat and the opossum. The opossum at birth has eye development corresponding to an infant only three months after conception. In an effort to produce the disease, we have obtained premature pigs by Caesarian operation, and have raised some of them successfully in an incubator similar to the manner in which premature infants are raised.

Despite the absence of an effective cure, there are several medical and surgical treatments of value in various stages of the disease in preventing and alleviating some of the complications, thus preserving the eyes from total destruction.

Although this discussion is from a medical viewpoint, the greatest impact of the problem at the present time is on the social service worker, the nursery school teacher, and those skilled in all phases of education of preschool blind children—and perhaps as important, those skilled in the education of the parents, relatives, and friends of the children as to the proper manner of caring for these infants.

FOOT TRAVEL AT VALLEY FORGE

LT. RICHARD E. HOOVER
Valley Forge General Military Hospital

The word "orientation" as used by the Army and by others usually involves so many different phases of training and life it might not convey what it should when speaking of foot-travel by the blind. The term foot-travel thus supplants orientation as a way of describing the processes taught to and practiced by patients cared for within our service.

Foot-travel by itself takes on an entirely new aspect when one is partially or totally deprived of sight. It is still the same form of locomotion as is usually learned at a very early age with the exception that now, instead of placing the main responsibility of guiding upon the eyes, greater dependence must be placed upon the other natural aids and often upon

some artificial ones to make it possible to move about in comparative safety.

Since these natural and artificial aids are used in specialized ways, it can be safely assumed they must be learned. We know their use can be taught.

The Pupil

The pupils with whom we deal have only two things in common. At one time all of them could see and at one time all were healthy enough to be inducted into the armed services. In age they range from the teens to the sixties. In stature, in environment, in education, in interest, in pre-war training and in native ability, the range is just as wide. Many suffered multiple handicaps when wounded. Some have also lost their sense of smell, some their sense of taste, some their hearing, some their limbs. Many others have brain trauma. There are a few who have combinations of many of the above.

Their loss of sight has been incurred in many different ways. The greater percentage were wounded in action. A small group were the victims of accidents. In the minority are those whose vision was impaired by disease or poison.

They have been sent to us from all over the world. Mostly they came from the European Theater, but there are others from almost every place troops were stationed.

Before arriving at our hospital, all had been handled differently—medically, physically and psychologically.

From a medical standpoint, it was not always easy, or possible, to give exact diagnoses and prognoses before shipment to another hospital. Frequently, the complicated conditions existing made it impossible to tell the patient his exact chance. Many other wounds may have accompanied damage to the eyes, making the patient bedfast for a long period of time, or he may have been hurt only slightly, being ambulatory within a very short while.

Even though a patient was ambulatory, it was often times easier to transport him by litter than to have inexperienced people attempt to guide him. It was often easier to feed the patient than it was to give him the few necessary instructions so he might feed himself.

Some few were encouraged to do for themselves and to move about on their own; others were sheltered.

People, trying to be kind, often related exaggerated tales of what surgery might do and of what miraculous feats blind individuals they knew (or more probably had heard about) had accomplished. Still others were pessimistic in their views as to the future for a person with damaged eyes.

Due to all that has happened to a patient up to the time when he actually lands in our care, it is a big task for us to get to know him as the individual he is. Of the over 800 classified blind who have passed through our installation, approximately 40% have no useful travel vision and thus needed training in foot-travel.

The Instructor

Since, in the Army, there were very few available personnel who had previous training or experience in this specialized work and because at one time we had 330 patients, necessity made it imperative to select enlisted men and train them for the service they were to give. More recently, since many of the men have been separated from the service, we have replaced them with female instructors, who formerly had been doing slightly different work with our services. They were also given a rigorous course of training.

The type and caliber of instructors differ as widely as do the patients, thus making it possible to assign patients to instructors with whom there is mutual enjoyment and companionship.

One excellent instructor was a truck driver in civilian life, another a life insurance salesman, another a musician, another a golf professional, another a farmer. We had plenty of room for a person with no particular specialty but who is used to managing things and getting things done. Each is encouraged to develop his own methods.

Some are successful by always being serious; others, by never being serious. Their main job is to find out what the pa-

tient wants, that is constructive, and help him get it.

Nearly every instructor reaches the point, sometime or other, when he thinks he is the only person who knows exactly what to do and how to do it. He should, then, be given a three-day pass.

The course of training consisted of two weeks or 98 hours of lecture, demonstration, performance and practical experience. Roughly, it was divided as follows:

1. Travel (20 hours)
2. Special Methods (12 hours)
3. Demonstrations (12 hours)
4. Sports (12 hours)
5. Background Lectures (12 hours)
6. Discussion (10 hours)
7. Detail Duty (6 hours)
8. Tests (8 hours)

Every week there is an hour set aside for group discussion and to refresh instructors on important phases of their service.

Policies & Practices

An enlisted (or recently a civilian) instructor is assigned to each patient within 24 hours of admittance to our service.

The instructor gives a different kind of aid to the patient in three stages through which the patient might pass while in the hospital. His responsibility is great. Usually, he spends more time, daily, with the patient than any other one individual.

The first stage occurs while the pupil is still in bed. During this time, the instructor's job is to gain the patient's confidence by performing services for him and through any other opportunity which presents itself.

In the second stage, the pupil receives the major part of his instruction. This occurs during the first weeks out of bed.

This leads to a third stage, during which time an effort is made to avoid hampering the independence the patient should be developing, by withdrawing somewhat the personal services of his individual instructor and allowing his relationship with the Rehabilitation Service to become more formal.

The strength of the relationship between instructor and pupil is a recognition on the part of the instructor of the patient's right to independence.

This is a recognition that the most skilled person cannot adjust a person who has been deprived of sight to his handicap. It must be done by the handicapped individual. If he is to succeed, if his personality is to remain his own, his will must be the deciding one, and no one can master it for him.

Soldiers are peculiarly adapted to giving the patient an alliance rather than domination. The army life has influenced most to recoil from assuming proprietorship, just as it has taught the pupil to repel it.

In any psychological experience which does not depend immediately on vision, we can expect to find commonplace reactions in the blind as in the seeing.

What is expected of the instructor is not that he have an intricate knowledge of abnormal psychology, but rather that he be a person who has the habit of using common sense and ordinary psychology of which everyone knows.

Can he or can't he keep in mind the simple fact that a blind man is one who cannot see?

The instructor is encouraged to use his initiative to a large extent and to encourage initiative in the pupil. The instructor plans his schedule for the day according to his patient's needs, adjusting his services to the additional requirements of the overall service and to the requirements of the medical department, to which rehabilitation activity is complementary.

Chiefly, he is concerned with instruction in travel within the hospital, with instruction in eating, with instruction in personal organization, with instruction in foot-travel on the outside and with the myriad, little things which make him a friend and companion. Many times he will take the patient bowling, bicycling, rowing, skating, fishing, hiking, swimming, riding, golfing, etc.

Is it any wonder personalities have to match?

Natural & Artificial Aids

In traveling by foot and alone, without sight, there are certain things everyone will try to do. He will try to avoid bumping into objects with the body or tripping over objects with the feet. He will try to keep from stepping into open manholes, cellarways, off curbs unexpectedly or from falling down stairways. He will try to walk a comparatively straight line. He will try to remember where he is going and where he has gone.

To enable them to do all these things, our patients are taught to make use of the following five natural aids, and, when necessary, one or more artificial aids:

1. Sound
2. Touch
3. Scent
4. Muscular Sensation (sometimes called kinesthetic sense)
5. Obstacle Sensation (called almost anything)

The first three of these are the ones they are taught to depend on most and most consciously. They depend less and less consciously on the last two.

Muscular sensation becomes muscular memory when it is looked back upon in the mind. It enables the person to repeat muscular activities already learned.

Obstacle sensation (labeled many other ways, either properly or improperly) is the fifth natural aid in foot-travel and is not to be exaggerated. Of the five aids, it could be said to be the least reliable and at all times to be completely depended upon since it differs so among individuals, as it is more or less in evidence on different days and since it lends itself readily to deception and unconscious self-deception.

It was felt by our service that to know the skill of foot-travel without sight, each of our instructors would benefit greatly by being blindfolded and given instruction in performance as much as possible. By this method he would be made quite conscious of what he felt through the shoe soles, of what he heard, of what he smelled and what those sounds, smells and obstacles mean to people who cannot see.

Of course, circumstances were not sufficiently real to develop perceptivity to the extent a permanently blind individual might.

It did help, however, since it made each instructor conscious of such important questions as:

1. On what am I walking?
2. What is that noise and from where is it coming?
3. Is it familiar or unfamiliar?
4. Is that beer or coffee I smell?
5. How far have I traveled?
6. Can this be used as a landmark or can't it?

The Army General Hospital is a good starting point in giving basic training in travel since it is not so complicated as other places might be. Corridors connect nearly all points to which it is necessary and pleasant for a patient to go. The P.X. barber shop, bank, post office, clinics, chapel, mess hall are all within his reach.

For each of the 22 lessons within the hospital an objective is readily provided, and, yet, it is not so difficult as to present defeat in the beginning.

Of the 22 lessons just mentioned, the first six are taught without the use of an artificial aid. This is done to demonstrate in the very beginning, when everything is hardest, how easy it is to travel in comparative safety without a cane, thus avoiding development of unnecessary dependence upon the cane and the development of undesirable techniques in its use.

The instructor is in a better position, too, at the beginning of the seventh lesson to have the patient use the cane for what it is intended, i.e., a bumper and not a probe.

Some might ask: If it is so easy to travel in the beginning without a cane, why ever even suggest its use let alone teach it? An answer to that might be another question? Why put bumpers on cars which could travel in comparative safety without them.

Another answer may carry more constructive value. A cane in the hand can be a good conducting rod for nervous en-

ergy (as well as a weapon), and bad habits developed through use of a cane disappear with the laying aside of the cane.

At the end of the twenty-second lesson inside the hospital and the ninth lesson downtown, a complete and objective test is given. If it is passed, the pupil is entitled to a furlough.

One's independence increases with mobility; therefore, great stress is placed on foot-travel in outside areas. The cane is used at all times during this instruction, and emphasis is placed on a standard, effective technique to be described in detail. Our aim is two-fold: (1) To make every patient able to travel in familiar environment without help; (2) to give him a system of learning his way around an unfamiliar environment with a minimum of sighted assistance.

Technique

During the lessons when the patient does not use the cane, an adopted, uniform method of protection is used to eliminate the natural, inadequate attempts at groping.

Either the right or left arm is used. The upper arm is held at right angles to shoulder and parallel to the floor. The forearm is held parallel to the floor. The forearm is held parallel to the floor and at right angles to the upper arm with fingers extended and relaxed to protect the far side of the body.

A blinded person using a cane to the fullest advantage is recognized as a blind person, but, if the actions are engineered effectively, the attention drawn to the person will be favorable attention. The cane used inside the hospital is of almost any construction, but mostly we use the familiar, white, wooden cane. Canes used for outside travel should be all somewhat longer than those used inside, and all very light, weighing four to seven ounces. The length of the cane should differ with each individual but should be long enough to extend the distance of one stride when it touches the ground in front of the foot. Because of the supply problem, however, we are never able to secure the proper kind of cane for all of our student-patients and are obliged to use, for downtown travel, many of the wooden canes which are usually inadequate, short and clumsy. A limited supply of metal canes, approximately 45" long and weighing approximately six ounces, has proved superior in that they are wieldy, resonant and long enough to give protection.

The cane serves two functions. First, it is a bumper; second, it is a probe. It cannot be emphasized too strongly that its primary use is as a bumper. In order to use it in this manner when the patient is inside, he is told to hold it directly in front of his body. Crook is held in either hand but ordinarily in the right, for grasping the cane below the crook and turning the crook outward protects the hand from sharp corners, hot pipes, etc. The hand holding the crook is held twelve to eighteen inches in front of the hip, the cane extending outward and downward to within a few inches of the floor. The diagonal line of the cane from right to left covers an area as wide as the body of the person using it. This does not protect the user from all obstacles, but it protects against the majority of those most unpleasant to encounter. Those which it does not bump against are those which are suspended from above and very low ones in front of the right foot, if the cane is held in that hand; left, if it is held in the left hand.

When the cane is used downtown, the arm holding it is dropped in a natural position at the side, the elbow resting firmly on that section of the hip bone known as the iliac-crest. The cane is guided largely by the thumb and forefinger. If the cane has a crook, the crook is turned downward, with the hand holding the cane in a position close to the body and in front of the center of the body. The wrist moves back and forth, pivoting the cane so that the tip describes an arc before the user, touching the ground lightly on each side. The cane tip is moved in a rhythmic motion across the body in front of the foot and always touches in front of the foot which is about to be brought forward, making sure the foot will have a safe and unobstructed spot on which to be placed.

When a traffic intersection is reached, enough time is taken to insure safety while crossing. The cane is held as it was for inside travel, and the speed of the traveler is increasedly marked until the tip of the cane hits the opposite curb. The arm is then raised to measure the height of the curb, and, while stepping up onto the curb, his cane is still held diagonally as a bumper to avoid stepping into a mail box, sign post, fire plug or pole, one of which is usually on the corner. The increased speed in crossing the street helps to decrease the hazard from moving traffic. Immediately after ascension of the curb is completed, the foot-cane rhythm is resumed.

By using the technique described above, it is impossible to step unexpectedly off curbs, into holes, to wander onto the grass or bump any obstacle in the way which protrudes from the ground upward. It should be added, at this point, that each lesson given downtown to the patient is, in part, a lesson in being guided or a lesson in how he should instruct others to guide him.

Conclusion

It is wise to stress, in conclusion, how the above fits as a piece into the complete puzzle of each patient's rehabilitation. Volumes could be told of each particular phase of the service. Qualified and competent personnel are used to perform, supervise and direct every unit.

The methods and techniques have been used successfully enough in a great number of cases to prove their merit and worth.

Thus, by planning and organization, we are able to do in days what might have stretched into years. The cross-section has been enough to make the success fairly representative and conclusive.

Artificial aids to the blind, such as dogs and mechanical equipment, are other chapters and have been limited insofar as we are concerned to some pioneer experimentation in the development and use of an optical range finder.

WHAT HAVE THE BLIND BEEN DOING DURING THESE WAR YEARS?

DR. NEAL F. QUIMBY
Superintendent, New Mexico School for the Blind

We have already been told of the many types of work which visually handicapped people have done during the war: of the various factory operations, office work, selling jobs, and so on. In the Southwest we have not had as many opportunities for factory placement as some other sections, simply because we have fewer factories which are large enough to use mass production methods. However, we have a goodly number in factories and we have placed several in army camps and hospitals as laundry workers, typists, machinists, and stand operators. Farm work has attracted a group of our blind workers much to the satisfaction of the farmers who have engaged their services.

I would make these observations based on our experiences during the war period:

1. The capable blind can be placed in most of the major fields of human endeavor. These include industry, business, the professions, and rural occupations.

2. The placement of visually handicapped workers cannot be a hit or miss proposition. Too often we have made improper placements which have resulted in failures which have been detrimental to all blind workers. We need a specific and objective approach to the problem which will lead to satisfactory and permanent placements. Such a program will involve careful training by the schools for each prospective employee after careful investigation has shown the field for which the individual is best suited in terms of mental

ability, manual dexterity, emotional adjustment, physical equipment, personality, and vocational interests. These factors cannot be determined by subjective opinion alone. Every school should have a testing program which will give objective information which can be interpreted with the subjective judgments of counselors and teachers to arrive at as complete a picture as possible of each prospective employee.

3. There must be post placement supervision and employment adjustment after placement. Many problems arise for the blind employee which require the assistance and guidance of a counselor or placement agent.

4. Loans should be made available for the establishment of capable visually handicapped persons in independent businesses.

5. Pupils need more information concerning the many types of vocations open to them if they are to make intelligent choices. We cannot expect pupils to choose their future vocations wisely unless they have had an opportunity to study the various fields thoroughly. This is one place where most of our schools have failed miserably.

6. Abilities considered adequate in the time of labor shortage will not be acceptable in the time of labor abundance which is bound to come sooner or later. We must build our program with this thought in mind.

7. We need to set up specific objectives in our manual training departments in order that we will not confuse that which is taught purely as an education project with those subjects which are purely vocational. In other words, we need to understand better just what we are trying to do.

WHAT HAVE THE BLIND BEEN DOING DURING THESE WAR YEARS IN THE MIDDLE WEST?

LESLIE M. HAYS
Superintendent, Iowa School for the Blind

According to information that has been collected, the employable blind were practically all employed during the war period in war plants and in allied industries; with the exception, of course, of those who had previously established a business or had found work (or had been placed in a job) prior to the outbreak of the war.

In studying the positions listed in various state reports the following job descriptions appear with great frequency: Hand gauging, carton making, gear assembly, packing, loading, coil winding, drill press operator, spot welding, inspector, assembly, burrer, and corking machine operator.

During the war period many articles appeared in newspapers throughout the Middle West, praising the blind for their thorough and efficient work in war factories. Let us hope that this fine record will remain in the minds of employers and that the door will be left open to sightless workers in the post-war period. Although we can reflect with pride on the fine production record of the blind during the war years, we must now turn our attention to what has happened to the employable blind since V-J Day and to the prospects for the future.

As Iowa is a typical midwestern state and happens to be the one with which the writer is most familiar, I shall attempt to present some material dealing with this state. One year after V-E Day the placement statistics from the Iowa Commission for the Blind show that 35% of the blind, for whom jobs were obtained during the war, are still employed in their original positions. This is a fine record when one considers that many were working in war plants that ceased operating shortly after the close of the war with Japan.

Anticipating that our victory over the

Axis might be accompanied by abrupt work stoppage in war plants, the placement agents of the Iowa Commission for the Blind, placed as many workers as possible in plants that would in all probability revert to peace time production. To insure greater permanence for the worker the placement agent persuaded the employer to adopt a policy of employing one blind person to every 500 workers on the payroll. In this agreement it was understood that if the blind worker failed in the work he was given, the placement agent would be notified and would be permitted to replace the blind employee with another sightless worker.

Obtaining the consent of the employer to such a policy as the above requires time and sometimes delays placement. Over a period of time, however, it makes for continued employment.

The Iowa law stipulates that the superintendent of the state school for the blind shall be a member of the three-member commission for the blind. Because of this arrangement the school and the commission have a close relationship.

Representatives from the Commission visit the school several times each year. Individual interviews are arranged with members of the senior class each year also, and the data collected at those interviews are placed on file to assist the Commission's placement agents in helping plan a constructive program for the outgoing seniors of the school. Such a procedure supplements and enriches the school vocational guidance program.

As we plan for the future in our industrial training courses, we must carefully examine the many and varied jobs in which the blind have demonstrated competence. Upon the findings in such a study we can intelligently base our decisions concerning the need to discontinue obsolete courses, replacing them with new courses and up-to-date equipment that will train our present high school students adequately for positions that await them upon graduation.

DISCUSSION: "What Have Our Blind Been Doing During These War Years?"

The three speakers were in perfect agreement as to the type of work which has been done and concerning the need for our progress in acting in the future along the lines of what we have learned. The real question was in regard to how much vocational or prevocational work should be offered. How elaborate the programs in training for industry should be is still a question.

In the discussion which followed, two points were stressed. There is a definite need for an active vocational guidance committee during these next two very important years. Our real problem is ahead of us. This committee should be able to meet between now and the next convention, and it should be appointed by the new president as soon as possible. There should be an attempt at some type of a bulletin giving the benefit of the information gained by the committee. It was also suggested that the committee should be the result of the best efforts of the two organizations, the American Association of Instructors of the Blind, and the American Association of Works for the Blind.

Georgie Lee Abel, Chairman

Members of the Panel:

Leslie M. Hays

Neal F. Quimby

Josef G. Cauffman

DIABETES SURVEY AT PERKINS

DR. FORD
U. S. Public Health Service

We have been requested to make a brief statement on the survey being conducted among the blind in Massachusetts. The Massachusetts Division of the Blind and physicians in the state interested in the blind requested the U. S. Public Health Service to conduct a survey of the blind in Massachusetts to determine the incidence of diabetes.

A previous study of the reports sent in to the Office of the Division of the Blind in Massachusetts by physicians caring for cases showed an incidence of 3.8 per cent. The Society for the Prevention of Blindness has collected similar figures from 19 states with a total of 20,000 cases and these indicate an incidence of 2 per cent. These figures are several times higher for the incidence found in the general population. The most reliable estimates show that there are 1,000,000 diabetics in the United States, which would give us an incidence of roughly 8/10's per cent.

We know that diabetes is on the increase in the United States due to several factors, probably the greatest being the increase in the average age of the population. The death rate has doubled in the past decade and has been estimated that it will exceed that of tuberculosis by 1950.

Much can be done to prolong life and prevent complications if the patient's diabetes is discovered early. We know from previous studies that diabetes exists in a large number of persons without their knowledge. Diabetes is a disease in which part of the food escapes use by the body and appears as suger in the urine. The sugar in the blood reaches high levels also. Diabetics are more susceptible to infections, various eye complications, and, it is thought, to hardening of the arteries and high blood pressure. The principle eye complications are hemorrhage of the retina and cataracts. The disease may be controlled by insulin and diet and by maintenance of normal weight.

We have attempted to employ the best available diagnostic methods in our survey in order to, if possible, find many more unsuspected cases. We are proceeding by the taking of blood specimens which are tested for the amount of sugar, a urine specimen which is tested for presence of the sugar, and a short history dealing with certain points of interest in the diagnosis of diabetes. To date approximately 350 tests have been done. This is not sufficient data on which to report, but we will present material for publication at the completion of the survey. This survey is one of the first moves in a national program for diabetes control being instituted by the Public Health Service. We feel that if we find many early cases of diabetes and route them to physicians for medical supervision that many complications will be prevented, not the least of which will be those leading to blindness.

PANEL DISCUSSION ON NEW TESTS AND MEASUREMENTS FOR THE BLIND

SAMUEL P. HAYES, Chairman
Perkins Institution and Massachusetts School for the Blind

Mental measurement is now practically a separate profession, like medicine, teaching or the law. An enormous literature has been produced dealing with theory and practice, and tons of paper have been used for test purposes. Every area of life has been invaded. If you wish to adopt a baby, you may be saved from taking a feeble-minded one by a scale set to measure maturation during the first few weeks; all through childhood, intelligence and achievement tests may help you and your child's teacher to balance progress with capacity; vocational aptitude tests and interest inventories may determine the next step for your adolescent offspring; personality questionnaires may help in matrimonial choices or business partnerships; and when you retire from active life, devices are at hand to aid you in growing old wisely.

Preparation for the profession of mental testing is given in most colleges and universities, and requires many hours of lecturing and demonstration, supported by long lists of required readings. Those of you who have gone the farthest in this special line will be most conscious of the difficulties of all mental testing and the added list of troubles incident to the testing of handicapped groups. Today we shall assume familiarity with, and interest in, the test movement, bring to your attention certain special areas of activity, and try to answer questions on any other topics on which you may need help.

For convenience in handling our wealth of material, I have collected for your study four books of paper test material classified as:

Intelligence tests
Achievement tests
Aptitude tests
Personality Measurements

My own work has been largely confined to the first two groups. The other speakers will have something to say about the other two groups.

Thirty years ago I was asked to make a study of the pupils in the Overbrook school and see what could be done in adapting for use with blind children, the mental measurements then in common use. With our collections of intelligence and achievement tests, you will find lists of references to the articles which have issued from my study, and the work of a few other psychologists who have been similarly interested. I have always been happy to assist any school in starting or continuing a test program, and so many have taken advantage of this help that I am constantly surprised that there are still some schools where no testing seems to be done. Please consider that I am at your service at any time.

Every few years someone has urged me to work on Vocational Aptitude tests for the blind, and last winter I gathered together in Perkins Monograph Number 14 all the material I could find on the subject, beginning with some groundwork experimental studies we had made in the Psychological Laboratory at Mt. Holyoke College. Real progress has at last been made by Dr. Roberts and Mrs. Mary K. Bauman at the Trainee-Acceptance Center in Philadelphia and presently we shall hear about this work from Mrs. Bauman.

Both the Army and the Navy have been anxious to gain any help possible from the use of tests in the vocational guidance of blinded personnel. Dr. Jacob Levine has been engaged in this work at the Army Old Farms Convalescent Hospital at Avon, Conn., so we have invited him to tell us unofficially whatever he thinks would interest you about the purpose, methods and results of the testing program.

The Office of Vocational Rehabilitation has instructed Dr. Salvatore G. DiMichael to make a study of tests and measurements available for the vocational guidance of blind civilians and veterans, so that State Agencies may take advantage of the best we have to offer. We hope Dr. DiMichael will tell us what his recommendations are likely to be.

We feel sure that many questions will be raised in your minds which you would like to have discussed by our visiting experts. As soon as you have heard from them there will be a brief period for general discussion, after which we shall move our collection of test material to the Library, and entertain questions on details.

SUMMARY OF DISCUSSION OF TESTS FOR THE BLIND

MARY K. BAUMAN
Personnel Research and Guidance, Philadelphia

Only tests done with the hands were discussed, other kinds of tests being covered by other panel members. Since the first need for the development of these tests had been felt in an industrial area, our orientation has been largely toward the usefulness of a test in work with industrial applicants. The following tests were found to have little or no value in testing from this point of view, and particularly with totally blind persons; a sorting and assembly task, the O'Connor Finger Dexterity test and the Purdue Pegboard. Those tests which had been found useful were described and demonstrated: the Minnesota Rate of Manipulation, the Pennsylvania Bi-Manual Worksample and the Toolsample. The adaptations in instructions so that these might be used with the blind were discussed but it was indicated that our philosophy is that norms established with a seeing population should be used since, industrially, the blind are in competition with seeing workers.

The general trend of results of the use of these tests indicates marked differences when even a slight amount of usable vision is retained; these differences vary in proportion to the amount of orientation in the work space required by a given test. Results also favor those with superior or average general mental ability; those of inferior mental ability are handicapped even on these repetitive tasks. Our results showed no differences which could be related to cause of blindness as that was reported by the client. With the Minnesota Rate of Manipulation and the Pennsylvania Bi-Manual, results strongly favored those clients who had been blinded early in life or who had been blind for more than ten years; on the Toolsample the reverse was true, suggesting that the handicap which many blind adults experience in the use of tools is a handicap produced by lack of normal contact with tools rather than by blindness directly.

New tests now being used experimentally were mentioned briefly: the Screw Driver Dexterity Test, and the Dearborn Formboard which however is used as a measure of learning rate rather than of motor skill.

PSYCHOLOGICAL APTITUDE AND ABILITY TESTS IN THE REHABILITATION OF THE ADULT MIND

SALVATORE G. DI MICHAEL *
Office of Vocational Rehabilitation, Federal Security Agency

The public rehabilitation program is a permanent endeavor. As such, it is obligated to furnish constructive guidance that will inspire realistic confidence in its clients, and to make placements that will maintain or better the average production records so as to dispose the employer to hire other handicapped workers. The placement of blind people cannot be carried out on the basis of charitable sentiment. When the blind individual is placed on a job, the rehabilitation counselor must be reasonably certain that he will adjust satisfactorily and produce his share in comparison to other workers. A misplacement may cause such bad public reaction that its ill effects may not be erased. This has happened.

It is imperative, then, for the public rehabilitation program to assess the true abilities of the blind person, to suggest suitable and realistic vocational goals, to have the individual accept the plan as desirable, and finally to place him on the job suited to his abilities, interests, and personality.

Reliance upon the interview alone as a means of determining the individual's potentialities and abilities is hazardous. More objective evaluations of assets and limitations are required. It is here where psychological tests can make a significant contribution. They can furnish a means of comparing a person's abilities with a cross-section of the population, indicate the individual's relative abilities, and estimate the chances of succeeding in certain occupations.

Psychological tests for the blind are, on the whole, not comparable in scope and quality to those for the sighted. Research efforts have been too few. It can be assumed that this fact has impeded quality guidance, counseling, and placement for the blind.

The Office of Vocational Rehabilitation and the States Agencies and Commissions for the Blind who work together in civilian rehabilitation are keenly aware of the lack of a complete battery of psychological tests for their clients. They have in the past encouraged and even sponsored efforts to develop, standardize and validate tests for the blind. These endeavors will be increased in the near future, when a carefully planned program will be launched to develop at least a minimum all-round battery of vocational aptitude and ability tests. It is hoped that agencies interested in the rehabilitation of the blind will extend their active and continuing cooperation in this program.

Although the psychological tests available for late adolescents and adults are not complete enough to serve as a basic vocational aptitude battery, there are some which the Federal Office of Vocational Rehabilitation is recommending for use. It is more helpful to employ the few tests now, than to wait until a complete and scientifically validated battery is ready. A sizable number of state rehabilitation agencies for the blind currently are testing all blind clients whose guidance can be helped by the services of a competent psychologist. Other agencies desire to install this practice and are asking the Federal Office for consultative assistance.

The tests presently recommended are given below. A number of achievement tests are not included because these are more applicable to school situations. In special cases, the achievement tests also are of value in rehabilitation.

Mental Ability Tests

1. Wechsler-Bellevue Adult Intelligence Test—Verbal Scale. A tryout of this test upon students over fourteen years of age

* This article represents the experience of the writer and does not necessarily reflect the policy of the Office of Vocational Rehabilitation, Federal Security Agency.

at Perkins Institute yielded satisfactory evidences of reliability and validity. The author made three modifications to the test administration.[1]

This is the most satisfactory mental test to administer to blind adults. It must be given individually by a trained psychometrist. Norms are available for adults at all age levels, on the basis of a sighted population.

2. Interim Hayes-Binet. This is an adaptation of the Terman-Merrill Revision of the Stanford-Binet test. Hayes tried out the apparently suitable sub-tests from the L and M forms of the latter, and devised a single scale for the blind. The norms are tentative, hence the scale is termed an "Interim" edition. When the Wechsler-Bellevue scores are of doubtful meaning due to such factors as coaching, lack of rapport, errors in administration, the Interim Hayes-Binet can be given individually.[2]

3. Kent E-G-Y. This should be used only in an emergency (E-G-Y)[3] situation, where no more than ten minutes can be devoted to the mental testing. The results furnish a rough measure of mental ability. It has been assumed, not proved, that this test is suitable for the blind, because the items are of the verbal type. The test should never be used where language deficiency is suspected.

Manual Ability Tests

4. Minnesota Rate of Manipulation. Although tried out on the blind by many centers, only one article[4] has appeared in professional journals presenting experimental results.

The report describes a modification of the first part of the usual test renamed the Displacing Test, which does not penalize the blind for difficulty in accurate reaching and placing movements. The second, the Turning Test, remains the same except that the blind are permitted three practice trials instead of one. Norms presented by the author are on a sighted normal adult population, ranging in age from 20 to 39 years inclusively.

5. Pennsylvania Bi-Manual Worksample. This is a two-handed test which measures speed and coordination of assembling a series of nuts and bolts, and placing the units in a square series of 100 holes. The article which describes the results on this and the test mentioned immediately before, reports rough validation studies on adults successfully employed in industry. Further experiments are needed to refine and extend the use of this instrument.

Mechanical Abilities Tests

Judging by the experimental literature, this is the weakest area in the psychological testing of the blind. A few efforts have been made but only one has been reported in a journal of accepted professional standards. The test, called the Toolsample,[5] is not purchasable from any distributor, probably because it is too bulky and clumsy to move. Persistent and intelligent research efforts in this area may contribute much to the vocational aptitude testing of the blind.

Interest Inventories

6. Kuder Preference Record. The better interest inventories standardized on the sighted population have been tried out by some guidance counselors on the blind. The value of using inventories in this manner has not been demonstrated by group experimentation, although the writer has found that the counselors who have employed it on the blind are enthusiastic about the results. One study in the literature presents the average percentiles obtained by a population of adolescent blind. No reliability or validity data are presented.[6]

---

[1] S. P. Hayes, "Alternative Scale for the Mental Measurement of the Visually Handicapped." **Outlook for the Blind**, 1942, 36:225-230.

[2] ———, "A Second Scale for the Mental Measurement of the Visually Handicapped." **Outlook for the Blind**, 1943, 37:37-41.

[3] Grace M. Kent, "Oral Test for Emergency Use in Clinics." Mental Measurement Monographs, 1932, No. 9.

[4] M. K. Bauman, "Studies in the Application of Motor Skills Techniques to the Vocational Adjustment of the Blind." **Journal of Applied Psychology**, April, 1946, 30:144-154.

[5] Ibid.

[6] N. F. Quimby, "The Vocational Interests of Blind High School Students." **Outlook for the Blind**, 1944, 38:127-129.

There seem to be many reasons why the Kuder Preference Record may be found useful with the recently blinded adult, or upon those persons with low but "useful" vision. On the whole, however, the inventory scores should be regarded as suggestive and experimental.

Personality Inventories

Personality inventories can be used in counseling, as a form of questionnaire, and as a measuring instrument. In the former instance the inventory is regarded as an abbreviated interview. The responses must be studied one by one, in much the same manner as a counselor would evaluate the replies of a client made during the interview. Such a study is valuable as affording occasions for gaining insight into the personality pattern. Inventories in this area have been found to be of greater help in counseling as a carefully prepared questionnaire than they have when numerical scores are taken as indicative of the effectiveness of the whole personality.

A number of experimenters have tried out, on blind groups, different personality inventories originally standardized on sighted populations. The results have not shown major differences between scores for the blind and for the sighted. The experimental results are difficult of decisive interpretation primarily because of two factors: first, the problem of securing a truly representative sample of the blind; secondly, most blind groups are taken from institutions, and the sheltered conditions impose less strain upon some aspects of personality than is true for persons in the outside competitive world.

Two promising instruments in this area are the Loufborrow and Keys Personal Index and the Minnesota Multiphasic Inventory.

7. The Loufborrow Personal Index was administered to all the students of 12 years and older in a school for the blind.[7] The items on the inventory were dictated to small groups and the pupils recorded their answers in Braille. As indicated by the scores of the Personal Index on the groups tested, the sight-saving pupils showed greater maladjustment than the partially-sighted pupils, while the totally blind showed fewer personal and social problems than either. All of the students who had been dropped from the school had made high maladjustment scores.

8. A graduate student at the University of Minnesota translated the Minnesota Multiphasic Personality Inventory into Braille and administered it to fifty blind persons, with an equal number from both sexes. A correction scale was developed to eliminate items affected by blindness. This resulted in changing the results on only two scales, the Mf and Hy, on both sexes, and Ma on the male group. Approximately fifty items showed significant differences when used with the sighted and the blind.[8] The results of this experiment cannot be appraised until the complete report is made available.

The tests described above are appropriate for the adult population that is totally blind. They are suitable also to those of limited vision and the normally sighted. However, some individuals with low but "useful" vision, who come under the technical definition of industrial blindness, are able to take almost any one of the tests now used with the normal sighted. It should be understood, then, that the given list of psychological tests is not by any means a complete battery for those with varying degrees of low vision. Agencies working with all degrees of industrial blindness should have almost all the tests used by guidance organizations dealing with the average sighted.

Psychological tests are now an accepted part of the program in agencies interested in education, rehabilitation, mental hygiene, in large and small business houses, even in national defense. Professional personnel in such organizations no longer ask whether psychological tests should or should not be used; rather they wish to find out where they belong in the total picture, and what are the values and limi-

7 D. H. Morgan, "Emotional Adjustment of Visually-Handicapped Adolescents." **Journal of Educational Psychology**, 35:65-81, 1944.

8 O. H. Cross. From private correspondence with the author. University of Minnesota, Minneapolis, Minnesota.

tations of certain tests. Agencies for the blind should consult with a psychologist who has specialized in problems of testing the blind. He can outline a testing program to take care of the needs of the usual cases which the school or agency handles, teach the staff how to use the pertinent instruments, and give instruction on the method of detecting unusual cases that need referral to a psychologist who is versed in the problems of the blind.

Future research in the field of the vocational aptitude testing of the blind can furnish real assistance to those of us who are dealing with the work of teaching, guiding, counseling, and adjusting the blind to life. Many promising starts in research have been made; few have survived.[9] With few exceptions, persistence in executing the research plans has been conspicuous by its absence in the area of developing vocational aptitude tests for the blind.

[9] S. P. Hayes, "Vocational Aptitude Tests for the Blind." Monograph 14. Watertown, Massachusetts: Perkins Institution, 1946, pp. 32.

THE TESTING PROGRAM AT OLD FARMS CONVALESCENT HOSPITAL

The testing program at Old Farms Convalescent Hospital, the Army rehabilitation center for blinded soldiers, consists of a battery of motor and verbal tests designed, primarily, to test the intelligence, aptitudes, and adjustment of each blinded soldier.

For these purposes a variety of manipulative tests has been developed or enacted to measure the proficiency with which each man is able to handle jobs involving manual operations such as are usually found in factory positions. Many men are subsequently placed in try-out positions in local factories.

Standard intelligence, personality and vocational interest tests are administered routinely and enable the Training Division to appraise and counsel each trainee more accurately. In a number of cases, men have been guided on the basis of test results into vocational fields for which they had never considered themselves qualified.

Dr. Jacob Levine
Consulting Psychologist

REPORT OF THE CREDENTIALS COMMITTEE

(List of the Delegates Present)

DR. A. L. BROWN, Chairman
Superintendent, Colorado School for Deaf and Blind

Superintendents

F. E. Davis, Arkansas School for the Blind, Little Rock, Arkansas.

A. L. Brown, Colorado School for the Blind, Colorado Springs, Colorado.

Frank Johns, Connecticut School for the Blind, Hartford, Conn.

Dr. C. J. Settles, Florida School for Deaf and Blind, St. Augustine, Florida.

John S. Herndon, Georgia Academy for the Blind, Macon, Georgia.

Burton W. Driggs, Idaho School for the Deaf and Blind, Gooding, Idaho.

Robert Lambert, Indiana School for the Blind, Indianapolis, Indiana.

Leslie Hays, Iowa School for the Blind, Vinton, Iowa.

Paul Langan, Kentucky School for Blind, Louisville, Ky.

Spencer Phillips, Louisiana State School for the Blind, Baton Rouge, La.

Francis M. Andrews, Maryland School for the Blind, Overlea, Md.
Dr. Gabriel Farrell, Perkins Institution and Massachusetts School for the Blind, Watertown, Mass.
John C. Lysen, Minnesota Braille and Sight Saving School, Faribault, Minn.
John W. Eakes, Mississippi School for the Blind, Jackson, Miss.
Robert H. Thompson, Missouri School for the Blind, St. Louis, Mo.
N. C. Abbott, Nebraska School for the Blind, Nebraska City, Nebr.
Dr. Neal F. Quimby, New Mexico School for the Blind, Alamogordo, New Mex.
Dr. Merle E. Frampton, New York Institute for the Education of the Blind, New York, N. Y.
E. N. Peeler, North Carolina State School for the Blind and Deaf, Raleigh, N. Car.
Herbert D. Jeffrey, North Dakota School for the Blind, Bathgate, N. Dak.
W. G. Scarberry, Ohio State School for the Blind, Columbus, Ohio.
Josef G. Cauffman, Overbrook School for the Blind, Philadelphia, Pa.
Mrs. Mercedes Carmona de Verdiales, Institute for Blind Children, Santurce, Porto Rico.
Dr. Jessie Royer Greaves, Royer-Greaves School for the Blind, Paoli, Pa.
Laurens Walker, South Carolina School for the Deaf and the Blind, Spartansburg, S. C.
W. E. Allen, Texas School for the Blind, Austin, Texas.
B. S. Joice, Western Pennsylvania School for the Blind, Pittsburgh, Pa.
Stanley Harris, West Virginia Schools for the Deaf and Blind, Romney, W. Vir.

Supervisors and Directors

A. C. Ellis, Superintendent, American Printing House for the Blind, Louisville, Ky.
Dr. Robert B. Irwin, American Foundation for the Blind, New York, N. Y.
George F. Meyer, Executive Director, New Jersey State Commission for the Blind, Newark, New Jersey.
Col. E. A. Baker, Managing Director, Canadian National Institute, Toronto, Canada.

Board Members

Col. Martin J. Collins, President, Missouri School for the Blind, St. Louis, Missouri.
Robert H. Hallowell, President, Perkins Institution, Watertown, Massachusetts.

Teachers

ARIZONA STATE SCHOOL FOR THE DEAF AND BLIND, Tucson, Arizona.
Dr. Louise Wilber

ARKANSAS SCHOOL FOR THE BLIND, Little Rock, Arkansas.
Miss Bernice Grantham
Miss Alva Howard
Miss Virginia Short

THE CONNECTICUT INSTITUTE FOR THE BLIND, Hartford, Conn.
Miss Mildred E. Bell

FLORIDA SCHOOL FOR THE DEAF AND THE BLIND, St. Augustine, Florida.
Miss Lucille Ferguson

ILLINOIS SCHOOL FOR THE BLIND, Jacksonville, Illinois.
R. W. Rodenberg

IOWA SCHOOL FOR THE BLIND, Vinton, Iowa.
Dr. Georgie Lee Abel, Principal
Miss Dorothy Rogers

KANSAS STATE SCHOOL FOR THE BLIND, Kansas City, Kansas.
W. Donald Overbeay, Principal

KENTUCKY SCHOOL FOR THE BLIND, Louisville, Kentucky.
Miss M. Blye Allan
Miss Margaret Traub

LOUISIANA STATE SCHOOL FOR THE BLIND, Baton Rouge, Louisiana.
William Crabin Gill, Principal

MARYLAND SCHOOL FOR THE BLIND, Overlea, Maryland.
Lloyd Mitchell
Miss Lois V. Cox
Miss Jayne D. Roof

PERKINS INSTITUTION, Watertown, Massachusetts
Miss Jessie Mayshark
Miss Susan Morse
Edward J. Waterhouse

MICHIGAN SCHOOL FOR THE BLIND, Lansing, Michigan.
Leonard Chard

BOARD OF EDUCATION, Detroit, Michigan.
Miss Edna Fink
Miss Helen Mount

MISSISSIPPI SCHOOL FOR THE BLIND, Jackson, Mississippi
Mrs. E. E. Allen
Louie Idon
George W. Cantin

MISSOURI SCHOOL FOR THE BLIND, St. Louis, Missouri.
Mrs. Ina E. Hubbard, Principal
C. L. Riddle
Mrs. Elizabeth Carpenter

NEW MEXICO SCHOOL FOR THE BLIND, Alamogordo, New Mexico.
Miss Helen Smith
Harry J. Ditzler
Oscar E. L. Newman

NEW YORK INSTITUTE FOR EDUCATION OF THE BLIND, New York, New York.
Mrs. George Muller
Benjamin Berinstein
Bassett Hough

NEW YORK STATE SCHOOL FOR THE BLIND, Batavia, New York.
Edward H. Brayer, Principal
Miss Grace T. Towsley
Miss Myra F. Morgan

NORTH CAROLINA STATE SCHOOL FOR THE BLIND AND THE DEAF
T. E. Stough, Principal

CLEVELAND, OHIO BRAILLE CLASSES (PUBLIC SCHOOLS), Cleveland, Ohio.
Miss Harriet E. Totman

OKLAHOMA SCHOOL FOR THE BLIND, Muskogee, Oklahoma.
V. R. Carter, Principal
Harold J. Higgins
John Meldrum

OVERBROOK SCHOOL FOR THE BLIND, Philadelphia, Pa.
Joseph J. Kerr, Principal Teacher
Mrs. Ethel K. Arthur
Miss Agnes Locuson

WESTERN PENNSYLVANIA SCHOOL FOR THE BLIND, Pittsburgh, Pa.
Mrs. Bradley S. Joice
Miss Grace A. Kildare
Miss L. Elizabeth Oberly, Principal

ROYER-GREAVES SCHOOL FOR THE BLIND, Paoli, Pa.
Howard C. Strickland, Principal Teacher
Mrs. Howard C. Strickland

SOUTH CAROLINA SCHOOL FOR THE DEAF AND THE BLIND, Spartanburg, South Carolina.
Miss Louisa Walker, Principal

UTAH SCHOOL FOR THE BLIND, Ogden, Utah
Guy Marchiseo, Principal

VIRGINIA SCHOOL FOR THE DEAF AND BLIND, Staunton, Virginia.
W. E. Burrows

WEST VIRGINIA SCHOOLS FOR DEAF AND BLIND, Romney, West Virginia.
R. Miller Golladay
Mrs. Stanley Harris

Honorary Members

ALABAMA
John W. Haynes

ARIZONA
Miss Adeline Hilkert

ARKANSAS
Miss Rose Fussell
Miss Ruth House

CALIFORNIA
Charles E. Buell
Mrs. Charles Buell
Miss Myrtle Westcock
Stanley Vosper
Mrs. Stanley Vosper
Miss Elizabeth Long

CONNECTICUT
Dr. Jacob Levine
Mrs. Frank Johns
Matthew Stanley
Mrs. Irma Hitchcock
Mr. Carol Hitchcock
Mr. Jesse Manley
Miss Emily Lawton

GEORGIA
Mrs. Lincoln Paradise

ILLINOIS
R. L. MacLean

INDIANA
Kenneth Bratt
Mrs. Robert Lambert
Ross Lambert

IOWA
Mrs. Leslie Hays
Miss Helen Hays
John Hays
KANSAS
Miss Agnes Burke
KENTUCKY
Miss Marjorie S. Hooper
Mrs. Paul J. Langan
LOUISIANA
Miss Paola Meaux
Harold Hein
Dietriche Rainke
Miss Ila Parent
Miss Nannie Poston
Miss Mary Welch
Mrs. I. M. Theus
Miss Rosetta Bolen
MARYLAND
Mrs. Francis Andrews
Richard Andrews
Hugh Johnson
Mrs. Hugh Johnson
Mrs. Lloyd Mitchell
Miss Eileen McNamara
Roy Ward
Miss Sophie Starr
MASSACHUSETTS
Mrs. Gabriel Farrell
Allen W. Sherman
Mrs. Mary McLaughlin
Miss Ethel Parker
Miss Alison Whitehead
Miss Rose E. Trainor
Miss Pauline Moor
Dr. Edward E. Allen
Mrs. Edward E. Allen
Alexander McNab
Edward Jenkins
John Hartwell
Joseph Jablonski
Mrs. S. F. Waterhouse
Miss Martha Winget
Mrs. J. D. Gomez
Miss Pauline Gomez
Miss Gertrude Seibert
Miss Shirlie Smith
Ben Smith
Miss Francis E. Marshall
Miss Beatrice Pinkham
Miss Marion Hoskins
Miss Florence Worth
Miss Clara Pratt
Miss Evelyn Kaufman
Miss Gertrude Harlow
Miss Muriel C. Herrick
Miss Arlene I. Eccles
Miss Bertha Feinberg
Frank Bryan
Walter Carr
Mrs. Walter Carr
Sidney Durfee
Mrs. Sidney Durfee
Miss Helen Drake
Miss Ethel Evans
John Egan
Anthony Ackerman
MICHIGAN
Mrs. Leonard Chard
Harriet Lombard
MINNESOTA
Mrs. Edith Rogers
MISSISSIPPI
Mrs. John Eakes
Miss Anne Thomson
Miss Mary Donoway
Miss Edith Alexander
E. E. Allen
Miss May Singletary
MISSOURI
Lester Best
Mrs. Lester Best
Miss Anna M. Howell
James Hendricks, Jr.
Mrs. M. Louisa Ryan
Montague Harvey
Miss Edith M. Smith
Miss Adelaide Robinson
James C. Walker
NEBRASKA
H. G. Salter
Mrs. H. G. Salter
NEW JERSEY
Miss Josephine Taylor
Miss Ethel Montgomery
NEW MEXICO
Miss Katharine Smith
Mrs. Harry Ditzler
Miss Ruby Brown
C. H. Tompkins
Mrs. C. H. Tompkins
NEW YORK
Baynard Kendrick
Miss C. Edith Kerby
Mrs. B. Kendrick
S. H. Fang

Mrs. Merle E. Frampton
Hugh Findlay
Mrs. Robert Irwin
Miss Ruth E. Wilcox
Miss Enid Griffis
Dr. Milton Stauffer
Mrs. Benjamin Berinstein
Miss Loretta Butler
Miss S. T. King
Miss Pauline Chen
Seth Hoard
Thomas Beadnell
Mrs. Thomas Beadnell
Mrs. Mary Ferguson
Miss Doris Linton
Mrs. Edward H. Brayer
Byron Ballard
Miss Gertrude Hallett

NORTH CAROLINA
Mrs. E. N. Peeler
Mrs. T. E. Stough

NORTH DAKOTA
Mrs. Herbert Jeffrey

OHIO
Mrs. W. G. Scarberry
Miss Anne Kessner

OKLAHOMA
Mrs. John Meldrum

PENNSYLVANIA
Mrs. Josef G. Cauffman
Miss Margaret Deaver
Miss Mae Davidow
Miss Helen E. Richman
Miss Dorothy E. White
Miss Flora E. Twaits
Miss Ida E. Price
Miss Mildred Schorpp
Murray H. Thompson
Mrs. Dorothy Nees
William T. Heisler
Clarence V. Shelnutt
Dr. Anna Newell
Josef C. Parker
Mrs. I. B. Parker
Miss Mary I. Walrond
Miss Ethel Baker
Miss Virginia L. Hooff
Miss May H. Levy

RHODE ISLAND
Cora G. Carr
Miss Bertha Mitchell
Miss Mary Cherlin
Kennison T. Bosquet

TENNESSEE
Miss Ruth Hall
Miss Martha Osborne

TEXAS
Mrs. W. E. Allen

UTAH
Clifton Patterson
Miss Irene Jones
Mrs. Guy Marchiseo

VIRGINIA
Miss Mabel Dunn
Miss Lena Dillinger
Robert Bruce
Miss Martha Kerster

WASHINGTON
Miss Lillian O'Neal

WEST VIRGINIA
Mrs. R. Miller Golladay
Joan Golloday
William Harris
M. Harris

FEDERAL
U. S. Navy
Lieut. Mary E. Kugler
Veterans Administration
Charles Bledsoe
Mrs. Charles Bledsoe
Library of Congress
Xenophon P. Smith

PORTO RICO
Mr. Ernesto O. Miranda
Miss Miranda and friend

SUMMARY

Superintendent Delegates	28
Supervisors and Directors	4
Board Member Delegates	2
Teacher Delegates	54
Honorary Members	183
Total Number	271

EXECUTIVE COMMITTEE AND THE REPORT OF THE SECRETARY-TREASURER

JOSEF G. CAUFFMAN

A meeting of the new Executive Committee was held at Little Rock, Arkansas, June 29, 1944, immediately following the business meeting and the election of officers.

In the absence of the President, Mr. W. E. Allen, Vice President, presided.

First order of business was roll call. Present were: W. E. Allen, Josef G. Cauffman, Francis M. Andrews, F. E. Davis, Elizabeth Carpenter.

The Secretary reported the election of officers as follows:

President, W. G. Scarberry, Superintendent, Ohio School for the Blind.
Vice President, W. E. Allen, Superintendent, Texas School for the Blind.
Secretary-Treasurer, Josef G. Cauffman, Superintendent, Michigan School for Blind.
Executive Committee: Francis M. Andrews, Chairman, Superintendent, Maryland School; F. E. Davis, Superintendent, Arkansas School; W. C. Gill, Principal, Louisiana School; Mrs. Elizabeth Carpenter, Teacher, Missouri School; Miss Georgie Lee Abel, Principal, Iowa School.

It was moved by Mr. Davis, supported by Mrs. Carpenter, that the Chairman of the Executive Committee be authorized to carry on necessary interim business, such as approving bills, etc. Carried.

Moved by Mr. Andrews, supported by Mrs. Carpenter, that the Secretary-Treasurer be authorized to pay bills upon approval of the Chairman of the Executive Committee. Carried.

Due to unsettled economic conditions no limits upon charges were placed for the 1946 convention but will be left for later discussion of the Executive Committee.

Moved by Mr. Davis, supported by Mr. Andrews, that the Secretary be authorized to have printed suitable stationery for the use of the Executive Committee. Carried.

It was moved by Mr. Davis, supported by Mr. Andrews, that the low bid of the Capital Printing Co., Lansing, Michigan ($3.75 per page), be accepted for printing the proceedings of the Arkansas conference, and the Secretary be ordered to distribute the same under the provisions of the Constitution and By-Laws. Carried.

It was moved by Mr. Andrews, supported by Mr. Davis, that the per capita assessment for the ensuing biennium be 25c. Carried.

Invitations for the 1946 convention were read. Dr. Frampton of New York Institute for the Education of the Blind, invited the Association by letter. Oral invitations were extended informally from Boston, Massachusetts, Vancouver, Washington, and Austin, Texas. Decision was deferred for further consideration.

Moved by Mr. Andrews that the Secretary be instructed to pay himself once a year. Seconded by Mr. Davis and carried.

There being no further business the meeting was adjourned by order of the presiding officer.

FINANCIAL STATEMENT — A.A.I.B. — 1944-1946

Receipts

July 1, 1944, Cash on hand	$ 902.85	
Memberships, 1944-46		
47 Residential Schools—dues and assessments	1,668.35	
2 Public Schools—dues and assessments	47.00	
6 Libraries—dues	60.00	
11 Commissions and other organizations for the blind	80.00	
Sale of Proceedings	52.50	
Payment of dues in advance (Hadley Correspondence School)	5.00	$2,815.70

Disbursements		
Postage & Misc. Tel.	73.88	
Printing	150.68	
Printing—Proceedings	502.50	
Personal Service—1944-1946	500.00	$1,227.06
		$1,588.64
Joint Findings Committee		
July 1, 1944, Cash on hand	8.74	
To J. C. Lysen	7.58	1.16
		$1,589.80
Accounts Receivable		
Arizona School for the Blind	5.00	
South Dakota School for the Blind	17.50	
Tennessee School for the Blind	45.00	$ 67.50

REPORT OF THE AUDITING COMMITTEE

The Auditing Committee of the American Association of Instructors of the Blind certify that the books of Josef G. Cauffman, Treasurer, have been examined and found to be correct and in order.

Robert Lambert, Chairman
Herbert D. Jeffrey
Howard C. Strickland
R. M. Golladay
Claudia Potter

REPORT OF THE RESOLUTIONS COMMITTEE

C. J. SETTLES, Chairman
President, Florida School for the Deaf and Blind, St. Augustine, Florida

RESOLVED that the 38th Biennial Convention of the American Association of Instructors of the Blind express to Dr. and Mrs. Gabriel Farrell our sincere appreciation for the wonderful hospitality extended to us during the Convention. We are indeed grateful to the staff of Perkins for their untiring efforts and for the preliminary work these people did in order to make our visit here a happy one.

RESOLVED that the Convention express its gratitude: To the Board of Directors of Perkins Institution for their gracious invitation to hold the 38th Biennial Convention at Perkins.

To the Music Department and students of Perkins for the beautiful music furnished us for our entertainment.

To all those speakers from Harvard University, Wheelock College, and Boston University for their cooperation and inspiring addresses.

To Colonel E. A. Baker for his challenging address which should make us evermindful of our responsibility to those whom we serve.

RESOLVED that the Convention of the American Association of Instructors of the Blind express its gratitude to the President, W. G. Scarberry, the Chairman, and members of the Executive Committee, and all officers of the Association for their untiring work in preparing, assembling, and the presentation of the program, also the membership of the Convention is grateful for the able management of the affairs of

our Convention during the trying times of the last two years.

RESOLVED that the Association express to the local press its appreciation for their reports of the meetings.

RESOLVED that since June 27 is the birth date of Miss Helen Keller, the Convention send a telegram to Miss Keller expressing our congratulations and best wishes.

The 38th Biennial Convention of the American Association of Instructors of the Blind extends felicitations and best wishes on the occasion of your sixty-sixth birthday.

Josef G. Cauffman, Secretary

RESOLVED that the Secretary extend the best wishes of the Convention and its hope for a speedy recovery to Eber L. Palmer, Superintendent, New York State School for the Blind, Batavia.

June 25, 1946

At the general session of the American Association of Instructors of the Blind convening this morning at Watertown the Secretary was instructed to extend to you the best wishes of those attending the Convention, and their hope that you may have a speedy recovery.

We were glad to hear the encouraging report that your general condition is improving, and we hope that you will be able to resume your activities in the near future.

Josef G. Cauffman, Secretary

WHEREAS there are hundreds of hand copied Braille books in this country resting on the shelves of our schools for the blind, the circulating libraries, the American Red Cross headquarters, etc.:

BE IT RESOLVED THAT THE AMERICAN FOUNDATION for the Blind be asked to compile a list of all such books and the location of the same. This would be of inestimable value to those people who might need or desire such books.

BE IT RESOLVED it having been brought to the attention of the American Association of Instructors of the Blind that the Social Security Benefits of Title No. 10 are not being applied to the blind citizens of the Territory of Porto Rico, it is the opinion of the American Association of Instructors of the Blind in assembly at Perkins Institute, Watertown, Mass., June 24-28, 1946, that this fact should be called to the attention of the Secretary of the Interior, Washington, D. C., in order that he may bring it to the proper governmental officials.

C. J. Settles, Chairman
Edward J. Waterhouse
Merle E. Frampton
F. E. Davis
Robert H. Thompson

REPORT OF THE NECROLOGY COMMITTEE

BURTON W. DRIGGS
Superintendent, Idaho State School for the Deaf and Blind

ALABAMA

Mrs. W. M. David, retired as Housekeeper and Dietitian
Alabama Institute for Deaf and Blind
Talladega, Alabama
Died: March 1945

Mrs. Carrie Shotts Haynes, Matron
Alabama Institute for Deaf and Blind
Talladega, Alabama
Died: May 9, 1945

COLORADO

Miss Geneva Lemons, Teacher
Colorado School for the Blind
Colorado Springs, Colorado

IOWA

Bess Arthand, Exceptional Teacher
Des Moines, Iowa
Reported by Ethel Holmes

KENTUCKY

Clifford B. Martin, Superintendent 1923-30 (Blind man)
Kentucky School for the Blind
Louisville, Kentucky

John F. Adams, Member of Advisory Board 1932-45, Kentucky School (Broom Manufacturing Business)
Louisville, Kentucky

MARYLAND

John Francis Bledsoe, Superintendent 1906-1942
Maryland School for the Blind
Overlea, Maryland
Died: March 12, 1946

Irving Kohn, Member of Board of Directors
Maryland School for the Blind
Overlea, Maryland
Died: November, 1945

MASSACHUSETTS

Mrs. Cora L. Gleason, housemother and home visitor for forty-six years, prior to her retirement in 1933
Perkins Institution
Watertown, Massachusetts
Died: June 17, 1946

Miss Lenna D. Swinnerton, physiotherapist and teacher of corrective gymnastics, prior to her retirement in 1933
Perkins Institution
Watertown, Massachusetts
Died: December 7, 1945

Mrs. George H. Monks, member of the Ladies' Visiting Committee, and benefactor of the kindergarten
Perkins Institution
Watertown, Massachusetts
Died: April 22, 1944

Merle E. Tracy, graduate of Perkins in 1896, author and journalist
Died: March 4, 1945

Thomas Stringer, entered Perkins in 1891 as one of the most notable deaf-blind pupils, used his proficiency in woodwork
Died: October 11, 1945

MISSOURI

Geraldine Cravens Boogher, Librarian and Teacher
Missouri School for the Blind
St. Louis, Missouri

NEW YORK

Winifred Holt Mather, Founder
The New York Association for the Blind
New York
Died: June 14, 1945

Walter G. Holmes, President and Manager
Matilda Ziegler Publishing Company for the Blind, Inc.
Died: February 7, 1946

Judge Richard P. Lydon, Treasurer
Lavelle School for the Blind
New York City, N. Y.

OHIO

Dr. Albert D. Frost, Outstanding Eye Surgeon
Columbus, Ohio

OKLAHOMA

Mrs. Bessie T. Hicks, Nurse
Oklahoma School for the Blind
Muskogee, Oklahoma
Died: December 23, 1945

PENNSYLVANIA

Miss Sarah K. Sterling, Librarian and Teacher
Overbrook School for the Blind
Overbrook, Pennsylvania

John Crossan Dilworth, Member of Board of Directors
Western Pennsylvania School for the Blind
Pittsburgh, Pennsylvania
Died: August 23, 1944

Henry Randolph Latimer, Corporator
Western Pennsylvania School for the Blind, Pittsburgh. Also Head Teacher at Maryland School for Blind 1909-1921

Mrs. James M. Schoonmaker, Member of Board of Corporators
Western Pennsylvania School for the Blind
Pittsburgh, Pennsylvania

William K. Steiner, Music Director
Western Pennsylvania School for the Blind
Pittsburgh, Pennsylvania
Died: Sept. 10, 1945

TENNESSEE

Isaac Samuel Wampler, Retired Superintendent
Tennessee School for the Blind
Nashville, Tennessee
Died: 1946

WASHINGTON STATE
Harry Hartman, Member State Advisory Committee
Division for the Blind
State of Washington

No State Given—possibly Michigan
George Boland Case, Managing Director
Industrial Home for the Blind
Died: August 24, 1945

REPORT OF THE NOMINATING COMMITTEE

The Nominating Committee of the American Association of Instructors of the Blind present the following names for the Officers and the Executive Committee for the biennium of 1946-48:

W. E. Allen, Texas, President
Francis M. Andrews, Maryland, 1st Vice President
F. E. Davis, Arkansas, 2nd Vice President
Josef G. Cauffman, Overbrook, Secretary-Treasurer
Neal F. Quimby, New Mexico, Chairman, Executive Committee
Allen W. Sherman, Perkins, Member, Executive Committee
Mrs. Guy Marchisio, Utah, Member, Executive Committee
Mrs. Mercedes C. Verdiales, Porto Rico, Member, Executive Committee.
Mr. J. C. Lysen, Minnesota, Member, Executive Committee

Nominating Committee:
Leslie M. Hays, Temp. Chairman
Lois Cox
Louise Wilbur
Ethel K. Arthur

BUSINESS MEETING

Thursday Afternoon, June 27

The meeting was called to order by President W. G. Scarberry, Chairman, at 2:30 p.m.

CHAIRMAN: First we shall hear the report of the Credentials Committee from the Chairman, Dr. A. L. Brown.

(Dr. Brown read the report and moved that it be accepted. Mr. Joyce seconded the motion. The motion was carried.)

CHAIRMAN: The next report we shall call for is the report of the Necrology Committee, of which Mr. Driggs is Chairman. In the absence of Mr. Driggs and other members of the Necrology Committee, Mr. Cauffman has been asked to read this report.

(Mr. Cauffman suggested that Mr. Scarberry sound the gavel and request the assembly to rise during the reading of the report. This being done, Mr. Cauffman read the report.)

CHAIRMAN: The Secretary advises that this does not require a motion, so we shall order it placed on file.

FLOOR: I wonder if I could offer one name I think should be admitted—Walter Holmes, friend of the blind.

CHAIRMAN: The Secretary suggests that if you think of any names that have been omitted from this list to call after the meeting is over and give them to him. He will see that the names are incorporated with this list.

At this time, we shall have the report of the Executive Committee by the Secretary-Treasurer, Mr. Josef G. Cauffman. Mr. Cauffman.

(Mr. Cauffman read the report, and moved that it be accepted. Mr. Andrews seconded the motion.)

CHAIRMAN: It has been moved and seconded that this report be accepted. Is there any discussion? All in favor of the motion make it known by saying "Aye" (response of "Ayes"). Opposed—(no response). Carried.

We shall now hear the report of the Auditing Committee by Mr. Robert Lambert, Chairman. Mr. Lambert.

(After reading the report, Mr. Lambert moved that it be accepted. The motion was seconded by Dr. Quimby. The motion was carried.)

CHAIRMAN: The other day, by common consent, the report of the Braille Committee was carried over until today. The motion was made and seconded, I believe, that it be accepted. The discussion was postponed until this time. We shall ask the Chairman, Superintendent Langan, to come up and lead the discussion if there happens to be any. Mr. Langan, will you please come up front? There may be some questions.

MR. ANDREWS: Would it be possible for Mr. Langan to simply read the report—the part that contains the recommendations? Some of the people might not have been here, and it might help the discussion if he were to read the recommendations.

MR. LANGAN: I think there are only two recommendations in the report as submitted to the Convention the other day. The first concerned the embossing of the experimental series of primers and first readers in Grade 2, fully contracted. That was in a recommendation that sufficient schools had shown interest to cooperate in the project of making a two-year study and to submit the result of this teaching experience at the next Convention.

The second recommendation was in reference to the 1925 key with Braille music notation—that this key be re-edited to incorporate the signs and numbers adopted by the international conference in Paris in 1929.

The third recommendation suggests that this Convention deal with the American Printing House to publish a limited amount of beginning Braille music, stripped of signs for dynamics and nuances.

CHAIRMAN: Are there any questions? Any discussion? All in favor of accepting this report please say "Aye". (Response of "Ayes".) The report is accepted.

The next is the Resolutions Committee report. In the absence of Dr. Settles, who was called to New York, Mr. Thompson

has been asked to read this report.

(After reading the first resolution, Mr. Thompson moved that it be accepted. Mr. George Meyer seconded the motion.)

MR. A. ALLEN: I think a hand-copied catalogue was made some years ago by the Library of Congress. I believe they are now being importuned to produce a similar catalogue.

MR. ANDREWS: This resolution is the same resolution we had in two years ago, asking that the American Foundation do this. The Library of Congress catalogue is years out of date. Those of us who have students going to college right around the Library have been trying to find out what has happened to the hand-copied one, and where it is. It would be better for the Foundation to do such a service as that, rather than ask the Government to do it or we'd all be dead by the time it's done. I ask the President to take it under advisement.

CHAIRMAN: Very well. All in favor say "Aye". (Response of "Ayes".) Opposed—(no response). Carried.

(Mr. Thompson then read the next resolution, and moved that it be adopted. Mr. Alfred Allen seconded the motion. Having been requested to do so, Mr. Thompson reread the motion.)

MR. LYSEN: Whose idea is that, may I ask?

MR. THOMPSON: I am not sure. This report, however, was prepared under Dr. Settle's personal supervision. He did not give me anything except this report. Is there anyone here who happened to be connected with it?

CHAIRMAN: If there is anyone who can answer the question asked by Mr. Lysen, will he please do so?

MR. MEYER: I think that is a resolution that is in line with a development of events associated with changes that are being made in the Social Security Act. Mr. Irwin has sent out a good deal of material concerning the amendments that have been sought in the Act, and this has to do with one in which the contributions made to the Social Security fund through deductions from payrolls should be applied toward paying an allowance to people who are not able to work any more because they have lost their sight. If you people will recall the Social Security law, you will learn that in case of death, there are certain payments made to the estate of the deceased and for the support of the widow and so on. This is simply carrying out that idea in connection with the advent of blindness. I personally think it's a good move, whether the details connected with, as far as involved moves are concerned, are such that the A.A.I.B. would not undertake. It seems to me that it would be a rather advantageous support for the general movement which would include blind people in those who are cared for as a disability growing out of laboring work.

CHAIRMAN: Mr. Waterhouse.

MR. WATERHOUSE: Mr. Irwin handed in that resolution. Publicity may be received about the third.

CHAIRMAN: Any more remarks?

FLOOR: Does that mean you pay more into Social Security or does Social Security remain the same?

CHAIRMAN: Mr. Meyer.

MR. MEYER: It has nothing to do with the amount that is paid into Social Security. That is determined by law. As a matter of fact, an amendment was read the other day by the Ways and Means Committee that would raise that amount to one and a half per cent instead of one per cent of payroll. That has really nothing to do with the proposal in question. That is regulated by very much larger considerations than this small amendment.

CHAIRMAN: Let's hear from you, Mr. Allen.

MR. W. E. ALLEN: This resolution was presented to this organization and I opposed it for two reasons.

The first thing I am opposed to is the Government being in the insurance business—or the meat business, or the laundry business, or any other kind of business of that sort. In the second place, I certainly approve all legislation that must be asked for the blind, but I do not believe that this is a piece of must legislation. The first thing we know, the public is going to think that the blind are always standing with their hand out for some-

thing. So, as a member of the Association of Instructors, I oppose that legislation, because conscientiously I do not think that the instructors should support such a resolution. That is all I have to say about it.

MR. LYSEN: When is this to become available? Any time a person loses his sight?

MR. ALLEN: Any time in adult life.

MR. MEYER: That is the general import. I will say this: I don't want my remarks to be interpreted as a veteran's campaign in favor of this resolution, or against it, but, in view of the remarks Mr. Allen has made, I want to present just a little different point of view in connection with it.

It so happens that I happen to be in a position to observe the humiliation that directly comes when self-respecting citizens who have paid taxes all their life, and who have lived a constructive and contributory life for the community, find themselves stricken with blindness, and then have to apply for public assistance. It seems to me that in view of the fact that the Social Security Act has been drawn in such a fashion to provide the people who are approaching old age at the present time with assured income simply because they are retiring—in other words, it's planned income in order to obviate the necessity of old age recipients going on relief. So, it's only better constructive planning that that same service should be extended to blind people.

Certainly a person who loses his sight cannot foresee that contingency. It's something that ought to be insured against and it's something that ought to be approved with a minimum of humiliation to the blind person in question. Most of these people cannot continue work because they lose their sight in later years.

As far as facing the approach to the problem of placing blind people, I myself, having gone over the whole program do not think this particular piece of legislation would have any effect on that at all because it's part of such a very large program. If we are worried about the effect, the precise effect that this may have on the legislation, let us bear in mind that the legislation carrying out this idea is still to be drawn up and that all we are doing here is voicing the sentiment that some consideration of that kind should be read into the law that is going to be reframed by the Ways and Means Committee.

MR. LYSEN: I have a sneaking feeling that this is class legislation, if you want to call it that. It may mean that being blind, per se, means a pension. It may be when we get that, the public is going to take the attitude—why help a blind person as he's being taken care of anyway?

This program would set us back a hundred years.

MR. LAMBERT: Since there seems to be so much lack of understanding, I would suggest we defer this until we can become a little more intelligent on what we are doing.

CHAIRMAN: We have a motion to postpone this motion indefinitely. We are permitted to do that. (Mr. Lysen seconded the motion.)

MR. MEYER: I think it ought to be understood that that is virtually a "no" vote because two years from now such a vote will not be of any consequence.

MR. EAKES: I'd like to suggest that we defer this until two years and at the same time be given information on which we could inform ourselves until we return for the next meeting.

CHAIRMAN: All in favor say "Aye". (A response of "Ayes".) All opposed say "No". (A response of "No's".)

We had better take a standing vote on that.

(The Chairman then proceeded to take a count.)

There are forty-one for the motion, seven against. The motion is passed.

Now we shall have the report of the Nominating Committee.

MR. THOMPSON: There is one more resolution, Mr. Chairman.

(The Chairman gave Mr. Thompson permission to read the last resolution.)

MR. THOMPSON: Mr. Chairman, I move the adoption of this resolution.

(Mr. Andrews seconded the motion.)

CHAIRMAN: Are there any remarks?

MR. A. ALLEN: I request that the resolution be read again.

(Mr. Thompson reread it, and Mr. Allen continued his remarks.)

I am in favor of this resolution, but I can't see how you here can consistently support it in view of what you have just done with the previous legislation.

CHAIRMAN: Are there any further remarks?

DR. FARRELL: I believe that we should inform our Representatives of what we believe to be shortcomings in the Social Security Act. I am sure that they are not asleep on the job.

CHAIRMAN: Are there any further remarks?

All in favor of this motion say "Aye". (A response of "Ayes".) All opposed, "No". (No response.) The motion is carried.

Now we will have the report of the Nominating Committee. Mr. Ganey is Chairman. In the absence of Mr. Ganey, Mr. Hays will read the report.

MR. HAYS: Before I read the names, I would like to call attention to the fact that the constitution designated we should have a first Vice-President and a second Vice-President, which we did not have this year. This will account for the names of a first and second Vice-President.

(Mr. Hays then read the report of the Nominating Committee.)

I move that the nomination recommendations of the Nominating Committee be accepted.

(The motion was seconded.)

CHAIRMAN: Are there any remarks? As usual, I call for further nominations if anyone cares to offer them.

(There were no remarks or further nominations. The motion was carried.)

Mr. W. E. Allen is the new President.

Mr. Allen, will you please stand and accept this gavel and whatever authority goes with it? I congratulate you on having been elected the presiding officer. I trust you will have all the cooperation and all the good luck I have had in the same capacity.

MR. ALLEN: Ladies and gentlemen. I am very nervous at this time because I think that you have elected me to an office which I consider the highest honor in the United States in this field of work. I want you to know that I sincerely appreciate it, and I shall attempt at all time to maintain the dignity of this office, to be a creditable representative for the American Association of Instructors of the Blind, and to cooperate with other organizations and to constantly promote the cause of the blind for the next two years. Thank you.

(Applause.)

If there are no other announcements, I wish to call a meeting of the new Executive Committee immediately in the Deaf-Blind room.

If there is nothing further, the meeting is adjourned for two years.

(The meeting was adjourned at 3:25 p.m.)

HV1788 c.2
A
American Association of Instructors of the Blind, 1946

Date Due

HV1788 c.2
A
AUTHOR
American Association of Instruc-
TITLE
tors of the Blind, 1946

DATE LOANED	BORROWER'S NAME
	Robyn Bleiberg

c.1

Proceedings of the

39th STATED MEETING

of the

AMERICAN ASSOCIATION

of

INSTRUCTORS OF THE BLIND

Held at the

TEXAS SCHOOL FOR THE BLIND

Austin, Texas

June 21 to June 25, 1948

1853-1871: AMERICAN INSTRUCTORS OF THE BLIND

1872-1948: AMERICAN ASSOCIATION OF INSTRUCTORS OF THE BLIND

The Graphic Press, Inc.
Raleigh, N. C.

HV1788
A
Copy 1

Officers for the Biennium 1946-1948

W. E. Allen, *President*
Austin, Texas

Francis M. Andrews, *First Vice President*
Overlea, Maryland

F. E. Davis, *Second Vice President*
Louisville, Kentucky

Josef G. Cauffman, *Secretary-Treasurer*
Overbrook, Pennsylvania

Executive Committee

Neal F. Quimby, *Chairman*
Alamogordo, New Mexico

Allen W. Sherman
Watertown, Mass.

John C. Lysen
Faribault, Minnesota

Mrs. Guy Marchisio
North Arlington, New Jersey

Mrs. Mercedes Carmona de Verdiales
Santurce, Porto Rico

PREFACE

For some time past it has been evident to students using the proceedings of the American Association of Instructors of the Blind, that they were incorrectly numbered; the error occurring in 1871 at the time the name of the Association was changed. Therefore, the convention in Little Rock authorized the Secretary to make the necessary corrections; hence these proceedings become the 39th. Following is a list of Conventions in their proper order:

1st meeting: August 16-18, 1853 at New York, New York.
2nd meeting: August 8-10, 1871 at Indianapolis, Indiana.
3rd meeting: August 20-22, 1872 at Boston, Massachusetts.
4th meeting: August 18-20, 1874 at Batavia, New York.
5th meeting: August 15-17, 1876 at Philadelphia, Pennsylvania.
6th meeting: August 21-23, 1878 at Columbus, Ohio.
7th meeting: August 17-19, 1880 at Louisville, Kentucky.
8th meeting: August 15-17, 1882 at Janesville, Wisconsin
9th meeting: August 19-21, 1884 at St. Louis, Missouri.
10th meeting: July 6-8, 1886 at New York, New York.
11th meeting: July 10-12, 1888 at Baltimore, Maryland.
12th meeting: July 15-17, 1890 at Jacksonville, Florida.
13th meeting: July 5-7, 1892 at Brantford, Ontario, Canada.
14th meeting: July 17-19, 1894 at Chautauqua, New York.
15th meeting: July 14-16, 1896 at Pittsburgh, Pennsylvania.
16th meeting: July 12-14, 1898 at Lansing, Michigan.
17th meeting: July 9-11, 1902 at Raleigh, North Carolina.
18th meeting: July 20-22, 1904 at St. Louis, Missouri.
19th meeting: August 21-23, 1906 at Portland Oregon, at Vancouver, Washington and at Salem, Oregon.
20th meeting: July 14-16, 1908 at Indianapolis, Indiana.
21st meeting: June 28-July 1, 1910 at Little Rock, Arkansas.
22nd meeting: June 25-28, 1912 at Pittsburgh, Pennsylvania.
23rd meeting: June 28-30, 1915 at Berkeley, California.
24th meeting: June 4-7, 1916 at Halifax, Nova Scotia, Canada.
25th meeting: June 24-28, 1918 at Colorado Springs, Colorado.
26th meeting: June 21-25, 1920 at Overlea, Maryland.
27th meeting: June 27-30, 1922 at Austin, Texas.
28th meeting: June 23-27, 1924 at Watertown, Massachusetts.
29th meeting: June 21-25, 1926 at Nashville, Tennessee.
30th meeting: June 25-29, 1928 at Faribault, Minnesota.
31st meeting: June 23-27, 1930 at Vancouver, Washington.
32nd meeting: June 27-July 1, 1932 at New York, New York.
33rd meeting: June 25-28, 1934 at St. Louis, Missouri.
34th meeting: June 22-25, 1936 at Raleigh, North Carolina.
35th meeting: June 27-30, 1938 at Lansing, Michigan.
36th meeting: June 24-28, 1940 at Pittsburgh, Pennsylvania.
37th meeting: June 26-30, 1944 at Little Rock, Arkansas.
38th meeting: June 24-28, 1946 at Watertown, Massachusetts.
39th meeting: June 21-25, 1948 at Austin, Texas.

TABLE OF CONTENTS

	Page
Officers and Executive Committee	2
Preface	3
Table of Contents	4
Meeting of Superintendents and Principals	7
Address of Welcome	8
Response to Address of Welcome, *Neal F. Quimby*, New Mexico	8
President's Report, *William E. Allen*, Texas	9
Educational Work for the Blind in Mexico, *Professor Eugenia Cortes*, Mexico	14
A Philosophy of Education for the Future, *C. F. Arrowood*, Texas	18
Administrative Horizons, *A. L. Chapman*, Texas	23
New Horizons for the Curriculum, *J. G. Umstattd*, Texas	24
Greetings from Venezuela, *Mario Florentin*, Venezuela	33
Greetings from Monterrey, *Maria De La Luz Garza*, Monterrey	34
Some Necessary Steps in Organizing an Institute in a Residential School for the Blind for Mothers and Blind Babies, *Josef G. Cauffman*, Overbrook	34
What Is a Desirable and Comprehensive Plan for Aid to the Pre-School Blind Child and His Parents, *Frances E. Marshall*, Perkins	43
Why Should We Be Concerned About the Pre-School Blind Child? *Harriet E. Totman*, Cleveland	47
The Reading Program in the Elementary Grades, *Mrs. Rodella Binder*, New Mexico	51
Creating a Nature Interest in the Kindergarten, *Carolyn B. Cochran*, Perkins	60
The Reading Program in the Middle Grades. *Ruby Brown*, New Mexico	62
Stepping-Stones for Gloria, *Helena Drake*, Perkins	66
Dramatizing Number, *Helena Drake*, Perkins	70
Questioning the Application of Public School Methods in Teaching Arithmetic Computation to Blind Children, *Mollie Cambridge*, Perkins	74
Tendencies Which Create Unnecessary Problems in the Education of the Blind, *M. Florentin*, Venezuela	78
Social Adjustment Among Students of Junior High School Age, *Rachel F. Rawls*, North Carolina	81
What Are the Most Retarding Factors in Learning Seventh and Eighth Grade Arithmetic?, *Charles C. Riddle*, Missouri	86
Two Periods a Day, and What Came of It, *Nancy Linden Smith*, Texas	96
What Can We Do to Improve Our Social Studies Program?, *Hugh D. Johnson*, Maryland	98

Mental Health in Institutions for the Blind, *T. E. Stough,* North Carolina 99
Mental Hygiene in Schools for the Blind, *D. W. Overbeay,* Kansas . 104
Cooperative Guidance in Schools for the Blind, *Mae E. Davidow,* Overbrook 106
A Guidance Program in the Schools for the Blind, *Dr. S. M. Whinery,* Indiana 109
How Bad Are We?, *Francis M. Andrews,* Maryland 111
As I See Them, *Dr. Francis J. Cummings,* Delaware 115
By Their Fruits, *Harry J. Ditzler,* New Mexico 119
Report of the Committee on Legislation, *F. E. Davis,* Printing House . 123
Report of Committee of Teacher Certification, *F. E. Davis,* Printing House 124
Report of the Literary Course of Study and Vocational Guidance Committee, *Allan W Sherman,* Perkins 126
Braille Committee Report, *Paul J. Langan,* Kentucky 132
Report of the American Printing House for the Blind, *F. E. Davis, Superintendent* 134
Textbook Needs of the Schools for the Blind, *Egbert N. Peeler,* North Carolina 138
A Practical Program of Socialization, *J. M. Woolly,* Arkansas . . . 146
Life in a Residential School, *Dr. Francis J. Cummings,* Delaware, President, A. A. W. B. 149
Mathematics Used by the Blind in After School Life, Panel Discussion 151
The Tyranny of Vision, *Paul C. Mitchell,* New York Institute . . 152
A Plea for the Physical Sciences, *Robert E. Bruce,* Virginia . . . 157
Valuable Aids Necessary for the Science Curricula, *P. V. Maley,* Overbrook 159
A Newcomer Looks at Science Education for the Blind, *Christos Pappas, Jr.,* Perkins 161
Does Popular Music Rate Curricula Attention?, *Harry J. Ditzler,* New Mexico 163
The Blind Musician as Church Organist and Choir Director, *John Meldrum, Oklahoma* 165
Girls Physical Education Program in Schools for the Blind, *Dorothy Rodgers,* Washington 170
What Are the Possibilities of Organizing a Better National Track Meet, *Charles Buell,* California 172
Audio-Visual Aids and the High School Social Studies Program, *D. W. McCavick,* University of Texas 174
The Application of Audio-Visual Aids in the Social Studies Program for the Blind, *Mrs. Louise H. Hancock,* Texas 176
Nor Fish, Nor Fowl, *Josephine L. Taylor,* New Jersey State Commission for the Blind 180

What Is Sight-Saving?, *Helen Posz*, Minnesota 183
Report of the Large Type Department at the American Printing House for the Blind, *Marjorie S. Hooper* 185
The Relationship Between a Sight Saving Class and Braille Classrooms in a School for the Blind, *Donald W. Overbeay*, Kansas . . . 189
Pre-Vocational and Vocational Training in Schools for the Blind, *Robert Lambert*, Indiana 191
The Summer Employment Program for the New York State School for the Blind, *Eber L. Palmer* 196
Two Years of Travel Training at the Maryland School for the Blind, *Francis M. Andrews* 202
Report of the American Foundation for the Blind and Affiliated Agencies, *Robert B. Irwin, Executive Director* 204
The Use of Mental Measurement in the Educational and Vocational Guidance of the Blind, *Samuel P. Hayes, Ph.D.*, Perkins . . . 207
Psychological Tests for the Adult Blind in Vocational Rehabilitation, *Michael J. Shortley* 214
Business Meeting 220
Report of the Credentials Committee 221
Report of the Executive Committee 225
Report of the Auditing Committee 225
Report of the Resolutions Committee 226
Report of the Necrology Committee 227
Report of Committee on Nominations 231
Report of Secretary-Treasurer 232
Meeting of New Executive Committee 232

MEETING OF SUPERINTENDENTS AND PRINCIPALS

J. C. LYSEN, Chairman
J. J. KERR, Secretary

Those present:
Carl Gernetzky, Iowa
Richard Carter, Oklahoma
John S. Herndon, Georgia
Mercedes C. de Verdiales, Puerto Rico
Georgie Lee Abel, Iowa
Joseph J. Kerr, Overbrook
Paul J. Langan, Kentucky
Robert Thompson, Missouri
D. W. Overbeay, Kansas
Neal F. Quimby, New Mexico
C. J. Settles, Florida
E. Tillinghast, Arizona
Joseph Healy, Virginia
Francis M. Andrews, Maryland
Allen W. Sherman, Perkins
William T. Heisler, Virginia
Frank Johns, Jr., Connecticut
John W. Eakes, Mississippi
S. Van Voorhis, South Dakota
W. C. McMillen, Nebraska
S. M. Whinery, Indiana
Carl D. Monroe, Alabama
Robert Lambert, Indiana
J. C. Lysen, Minnesota
Leo J. Flood, Illinois
Egbert N. Peeler, North Carolina
A. L. Brown, Colorado
J. W. Woolly, Arkansas
B. S. Joice, Pittsburgh

To open the meeting Mr. Lysen read letters from the various schools presenting topics for discussion. There being so many requests, Mr. Lysen asked that those present suggest topics they cared to discuss.

First there was the matter of exchanging ideas among the schools, and mimeographed copies or publications were suggested. Each school should work out its own method of getting its information to the other schools.

Dr. Quimby suggested that the incoming president appoint a committee to work with the OUTLOOK for topics to be printed. It was seconded by Mr. Eakes of Mississippi and carried. This committee would act as a solicitation committee and carry out the program as it seems best.

Mr. Allen suggested that the foreign delegates be entertained by the Texas School.

The solicitation of gifts was the next item to be discussed. A number of the schools do receive gifts but do not make public solicitation for same. No action was taken on what the schools should do.

Mr. Healy, Superintendent Virginia School, presented the problem of separation of the schools for the blind and deaf at Staunton. He explained in detail their set-up.

A general discussion followed concerning the duties of the principal in the school, and it was the consensus of opinion that the problem should be worked out with the superintendent.

The last item to be discussed was that of reports to the parents. Many systems and methods were presented, but it was the consensus of the group that parents should be notified in such a manner that they might have a comprehensive picture of their child and the progress which he is making. It was also suggested that sample report cards from the schools be forwarded to the office of the secretary and kept on file in his office for the use of any school interested in referring to same.

There being no further business the meeting adjourned.

ADDRESS OF WELCOME

HALL H. LOGAN
Chairman, Texas State Board of Control

Delegates and visitors to the American Association of Instructors of the Blind, the Governor of the State of Texas, our Board of Control, and the school faculty welcome you.

We hope your conference will be most successful—your visit most pleasant.

Our Board is very much interested in your problems. They are a part of our problems. The Board of Control among twenty-five institutions is the governing board of the Texas School for the Blind. We are increasing our attention to our schools of special education for these exceptional children.

You are in Austin—deep in the heart of Texas—in our hill country and lakes, hills which are comparable with other mountains. We have killed deer within two or three miles of the capitol building;—we have found rattle snakes and a fox in the capitol basement. There are none in this school, however!

We are proud of our school, its faculty, and Bill Allen. So again, may I say a hearty welcome to Texas.

RESPONSE TO ADDRESS OF WELCOME

DR. NEAL F. QUIMBY
New Mexico

Mr. Logan, President Allen, Members of the AAIB, Friends:

I am proud to have the honor to respond, on behalf of the American Association of Instructors of the Blind, to your gracious welcome to the Empire of Texas. We are happy to be guests of this great state. Our genial host and president has done everything possible to make our convention a profitable and enjoyable occasion. He, like all Texans, does things in a big way. I can readily see why Texas has a reputation for hospitality which is unique. We accept your most cordial welcome to Austin.

Why have we gathered here from the rugged coast of Massachusetts, scene of our 1946 convention, from the flooded lands of the Pacific Northwest, from Mexico, Canada, and dozens of points between? We are met to further the work to which many of us have dedicated our lives. We are met to learn more about the task of educating visually handicapped children that they may become self-supporting and self-respecting members of society. The very fact that we are here is evidence that we wish to grow; that we will not, that we must not, become static; that we know education to be a progressive, everchanging, evolutionary process.

I believe that out of this conference will come much tangible evidence which will show conclusively that our schools for the blind have done, and are doing, an excellent job; that the graduates of our schools are living memorials who testify to the success of our work.

We are here to listen to constructive criticism of our work. We are here to formulate procedures which will lead to greater advancement in the future. We are here to learn from those who have something to offer. I must state, however, that I am tired of some welfare workers

and other critics who, with only a superficial knowledge of our schools, insist that a residential school develops a psychological blindness which prevents a graduate of such a school from ever adapting himself to the seeing world. Every social, emotional, or educational weakness is laid to the residential school. I say the record proves otherwise. I say the record is one of which we may well be proud.

We are far from perfect and we wish to improve in every way possible. We have much to do. We must improve our curriculum and our methods of teaching. We must coordinate our program more closely with the public schools. We must develop better cooperation with the various state agencies for the blind who assume the responsibility for our graduates. We must work to overcome the petty jealousies which seem to exist among many organizations who are supposedly working for the betterment of the blind.

The time has come when we must put our house in order. The time has come when we must evaluate our existing programs objectively and build a well rounded curriculum which will meet all the needs of all our pupils. We must begin now, tonight, to do what must be done. Let us learn from the many splendid addresses which will be presented at this convention. Then may we return to our respective schools and initiate such changes and improvements as will make it possible for us to do even better the work to which we are dedicated.

PRESIDENT'S REPORT

WILLIAM E. ALLEN
Texas

Mr. Chairman, Mr. Logan of the Texas State Board of Control, President Cummings of the American Association of Workers for the Blind, delegates from Latin-America and Canada, ladies and gentlemen of the United States.

In looking about for materials which might be of assistance to me in the preparation of this address, I naturally turned my attention to addresses given in the past by presidents of this association. They are excellent in character and they completely review the field of work in schools for the blind in a fashion which is most astonishing, but after giving some consideration to these writings, I find that for two important reasons I am not in the mood to follow the same pattern in greeting you as president at this time. So far as I know, it is the first time the president of this association is also designated as host. Furthermore, it seems that events and activities which have taken place during my administration are of such vital importance that my contribution to the program should be a report rather than a formal address.

As host of this convention, I wish to say for all of us at the Texas School for the Blind that we feel highly honored to have you with us and that it is our intention to make your stay pleasant. However, I cannot refrain from a little reminiscence at this point for there was another meeting of the association at this school in 1922 and at that time your president was employed as a teacher in the school. We young men teachers had looked forward to this event with great anticipation as we attempted to visualize beforehand all the various brands of feminine loveliness which would undoubtedly come to us from schools throughout the United States. Just as the meeting was

about to begin our expectations were dissolved by mother nature who sent a flood upon the city of Austin. Rivers rose, dams broke and the entire water system was put out of condition. From a large lily pool on the campus young men teachers were required to carry buckets or pitchers of bath water to the rooms of our guests. All romance was destroyed by the catastrophe so we attempted to supply other adventure by stealing a few cold watermelons which we thought had been discarded by a group of superintendents but later we found that these cold melons were intended for dessert at a luncheon for superintendents' wives. The superintendents threatened to court martial all of us but some unknown spirit intervened and nothing came of it. Now in 1948 we meet again in Texas and I am on the other side of the fence but I believe that I am still aware of the venturesome tendencies of the teacher who may have been somewhat suppressed at home so teachers, please feel free to enjoy whatever facilities we have in the wide open spaces deep in the heart of Texas. The recreation committee of our faculty has prepared for you a Texas Square Dance immediately after this meeting and we would like for all to attend.

To our delegates from the Latin-American nations, I wish to extend most sincere greetings. For some ten years a few schools and agencies of the United States have fostered closer cooperation between the United States and Latin-America in work for the blind and it is our desire that this first Inter-American meeting will form a strong bond of friendship between us which will never be broken and which will lead to many future conferences of mutual benefit. Again expressing the hope that your memories of the thirty-ninth meeting of the American Association of Instructors of the Blind will be most pleasant, I wish to proceed with a report to the convention of my activities during the past two years.

You may wish to call me the traveling president for I have made four trips during the past sixteen months in the interest of my office. These travels have exposed me to many divergent points of view and I must admit that although I may retain with a certain tenacity some ideas I have concerning the blind which have come through experience, I am more open minded than I have been previously. I am reminded of the story of the priest and the rabbi who met while traveling on a train. The news butch came into the car selling delicious ham sandwiches. They were really juicy and delicious so the priest bought one and said to the rabbi, "Will you have one of these delicious ham sandwiches?" The rabbi said, "No Father, I am sorry but we do not believe that we should eat ham so I do not wish to try one." The priest said, "You just don't know what you are missing. You had better try one sometime." It was not long till the train stopped at the destination of the priest and as they were bidding each other farewell, the rabbi said, "Well Father, remember me to the missus." The priest turned to him in dismay and replied, "My dear sir, you know we do not believe in marriage for a priest so there is no missus." The rabbi said, "Father, you should try one sometime because they are very delicious." So it seems that in work for the blind we sometimes hesitate too long to try those things that may be good for us.

In the spring of 1947, I attended the first national conference on the preschool blind child which was held in New York City under the sponsorship of the American Foundation for the Blind and I am told that the conference was suggested and promoted by Dr. Farrell of Perkin's Institute. Many interesting papers were

delivered and these papers have been compiled and edited in book form by Dr. Lowenfeld of the Foundation. These books may be purchased from the American Foundation for the Blind and I recommend the book for your library. After attending any conference one usually comes away with what he considers to be the high points of the meeting. My report on this conference may not resemble that made by others but it is my opinion that three subjects will demand further thought and attention.

(1) Due to statistical reports, all of us have been led to believe that the number of blind scholastics has gradually decreased over the United States during the past ten years. At this conference reports were made concerning an eye disease known as retrolental fibroplasia. This was a new term to me but all the medical social workers used the term as though it were an old friend. It seems that in some of the eastern states a number of premature babies are either spastics or the cornea of the eye is opaque causing blindness at birth. According to evidence shown at the conference, no remedy has been provided for the disease and no cause has been given except that of premature birth. It is to be hoped that this does not mean that there will be an increase in infant blindness in the United States.

(2) Concerning the care and training of the preschool blind child, it seemed to be the consensus of opinion of the majority reporting, that day nursery schools should be conducted in preference to admitting these children into residential schools for the blind. This point of view was not surprising to me for we all know that since 1900 in cities near the size of New York that theoretical sociological imaginings have led many so called modern thinkers to condemn the training and atmosphere of the residential school and to propose substitutes in the matter of training the blind child which can be carried out with only partial success in a city of half-million or more population. It must be admitted that if the day nursery in the large city has sufficient financial support to obtain the best medical care and the most efficient training personnel so that in addition to the day nursery these well trained teachers will have the opportunity to go into the homes of these children in order that a worthwhile influence may be exerted on the parents, we may have the best solution to the training of the preschool blind child, but in Texas where students are drawn from 95 different counties of this large expanse of territory, such a venture is impossible. In Texas it is not likely that we will be able to persuade parents to release preschool blind children to us for several months at a time. In fact, I doubt that such an arrangement would be advisable so we may attempt a plan of having both mothers and children come to the school for a summer period of possibly two months but I am not sure that this is wise as so much time would lapse between training periods. We all know that the preschool blind child needs attention but as to how this problem may be met, I am not prepared to say more than that we may be forced to approach the problem in a manner to be governed by local conditions.

(3) The last of the three high points of the conference is an opinion expressed by Dr. Irwin concerning the type of agency which should control the work done for the preschool blind child. He believes that this agency should be a state commission for the blind or its equivalent. Although I do not foresee that agencies will run a race or will contend for control of this type of work, I doubt that agencies engaged in work for the adult blind should attempt this project. It is clearly within the field of the residential school for it

bears no resemblance to vocational training and placement of the adult blind. Training of the preschool blind child is a forerunner of the primary work done in residential schools. Can you picture a nursery school for the seeing under the control of a United States Employment bureau? At any rate, we have experienced the first national conference on the preschool blind child and we are most certainly indebted to the American Foundation for the Blind for having made the initial step in the right direction.

During the latter part of May, our profession sustained a great loss in the death of Mr. A. C. Ellis, Superintendent of the American Printing House for the Blind. I attended his funeral principally because he was my friend of long standing. I also felt that a representative of the A.A.I.B. should be available in case the Executive Board of the Printing House would desire our counsel in the selection of a successor to Mr. Ellis. The chairman of the board did request such advice. He asked me as president of the A.A.I.B. to appoint a committee whose work would be to canvass the entire field and to submit names of several men to the Executive Board for consideration. I appointed the following committee: Dr. Frampton of New York, Mr. Andrews of Maryland, Mr. Langan of Kentucky, Mr. Cauffman of Pennsylvania, and Mr. Scarberry of Ohio. Dr. Frampton sent out a letter to all superintendents in which he asked for names of likely candidates to be submitted. The committee was then requested to hold a meeting in Baltimore. Mr. Scarberry was unable to attend so the committee requested your president to serve in his place. After considerable discussion, the committee approved recommendations to the Executive Board of the Printing House. A court reporter took minutes of the meeting. These minutes are sixty pages in type and any superintendent at this meeting is at liberty to read the copy now in my office if he cares to do so. At a later date the Executive Board appointed Mr. Davis of Arkansas to succeed Mr. Ellis. We think that the Board made a good selection and we wish for Mr. Davis much success in this most important undertaking. I wish to thank the entire membership of this committee for a job well done.

In Baltimore, also, an executive committee meeting of the A.A.I.B. took place. It appears that I received both written and unwritten instructions as a result of my contacts with members of this committee. The minutes of the meeting will show that I was requested to contact our State Department in an attempt to secure funds for the payment of expenses of Latin-American delegates to this meeting. Unwritten suggestions were to the effect that I would investigate the possibility of having our association become affiliated with other more powerful national organizations. I made an effort to carry out both the written and unwritten suggestions of my colleagues. After leaving Baltimore, Dr. Frampton and I spent two days in Washington where we contacted officials of our State Department, also officers of the National Rehabilitation Association. We received little encouragement from the State Department as to the allocation of Federal funds to our purpose, but officers of the National Rehabilitation Associatioin encouraged me to attend their national meeting to be held in Chicago at a later date. Subsequent to our interviews with the State Department officials, several letters were exchanged. Finally, my local congressman attempted to secure a special appropriation to pay expenses of Latin-American delegates to this meeting. Due to the fact that we would be setting a precedent and that all national organizations in the future could make similar requests the

House Committee did not think it wise to provide such funds for us.

In October 1947 I attended a meeting of the National Rehabilitation Associatioin which was held in Chicago. The officials were extremely courteous to me and arrangements were made for me to appear before the board of directors of the organization. I represented to the board that I was only investigating the possibility of the American Association of Instructors of the Blind becoming affiliated with the National Rehabilitation Association. I further stated that in the event we were invited to become affiliated with them, it would be necessary for me to refer the entire matter back to our own executive committee and possibly to the entire association before a final decision could be made. The National Rehabilitation Association did invite us to become a partner with them. After I returned from Chicago, I asked members of our executive committee to vote as to whether or not we should become affiliated with N.R.A. In my letter to the members of the committee I attempted to point out both the advantages and disadvantages of such an alliance. Our committee voted unanimously against the proposition and the president of the N.R.A. was so informed. This experience coupled with my efforts in the past to form a union of the A.A.W.B. and the A.A.I.B. indicates to me in a manner most definite that our association will never become affiliated with any other national organization. We are educators in a field of special education. We are able to exert whatever influence necessary in the passage of national legislation and we may lose our identity by affiliation with a larger national organization.

During my tenure as president, my observations and contacts with others have left with me certain strong convictions concerning residential schools of the future and I wish to present a few ideas in this regard. If the residential school has outstanding faults, let's eliminate these faults at once. If we have grown careless and have forgotten the objectives of education, let us remember that our mission is to give our boys and girls something which will enable them to live happily with the seeing, and to be rather absorbed by society than to be declared objects of charity or social outcasts. Let us have schools which will keep abreast of public school advancement. Let us place teachers in our class rooms who are well qualified and well paid. If we employ a blind teacher, let us select one who is outstanding but lets pay him according to the salary scale established for seeing teachers. Let's have a single salary system in order that all teachers may be paid according to their experience and college training. Let's have a principal teacher who comprehends thoroughly the complex schedule of a school for the blind in order that he may adjust pupils properly to the great number of opportunities offered them. Let's have superintendents who have faith in the possibilities of our boys and girls. Let these school administrators realize that their responsibility is to provide ample facilities to equip our pupils to live with a serious physical handicap in a world of keen competition. May we all give no quarter to those who would condemn the residential school as an undertaking which has been outmoded and may we all now reconsecrate ourselves to the grandest profession of them all to the end that every boy and girl who has come under our influence will feel an undying loyalty to his school which has put into his being the breath of life of a normal existence.

EDUCATIONAL WORK FOR THE BLIND IN MEXICO

PROFESSOR EUGENIA CORTES

In 1886, when Mr. Ignacio Trigueros was Mayor of the City of Mexico, he received a visit from Mr. Jose' U. Fonseca, who was accompanied by a stranger named Huet. Huet, deaf and dumb from birth and educated in Europe, was looking for official support to secure the directorship of a school for the deaf and dumb. Mr. Trigueros not only warmly received the idea of founding such an institution, which would have been the first of its kind in Mexico, but also saw the opportunity of carrying out an ambition of his: the education of the blind. To this end he asked for a specialized teacher from another country; but so many difficulties arose that it became impossible to obtain one. With these difficulties before him he resolved to learn the Braille system himself, taking advantage of the fact that Mr. Manuel Olid, a man blind from birth, had left with his family at his death, books written in Braille, a Braille slate, etc., which articles had been obtained by Mr. Olid in Europe during his education. Mr. Trigueros then communicated with the family, acquired these articles and immediately began to teach himself, achieving such success that he took charge of Fermin Serrano, a blind boy, as his pupil. This deed accomplished, there arose among friends of the teacher, the desire to collaborate, so he received literature and data from other countries, thus enabling him to discover how these countries were resolving the education of their blind. Then Mr. Trigueros sent and paid for books and equipment from Europe.

Having secured these needs, he located in the Old School of San Gregorio, where a room furnished by him personally, on the ground floor, he installed the budding school for the blind. A teacher was still needed, but that was no problem for the perseverance and energy of this man, who prepared one himself by teaching him Braille and the use of the slate. At the end of the year 1870, the school consisted of Mr. Trigueros, founder and director, a teacher educated by Mr. Trigueros, 4 pupils, some books and slates and the modest locale. This came to the attention of the government of Benito Juarez, who in May of 1871, gave the School for the Blind a part of the Convent of Teaching. In November of the same year, the Secretaria of Gobernacion put a tax on public lotteries, of which 15% would go to the suport of this school. These funds were to be handled by the Board of Directors, headed by Mr. Trigueros.

The school was then made into a boarding school, pupils numbering 11—9 men and 2 women. The number of students increased progressively between the years of 1872 to 1875, but in 1876 the school suffered a serious economical crisis which almost put it out of existence, but thanks to the constancy of Mr. Trigueros, and his help, the school was nationalized in 1877 under the government of Porforio Diaz, so that it was supported with incoming federal taxes and officially recognized.

With this attitude by the government, the life of the School for the Blind became definitely assured, then Mr. Trigueros, for reasons of ill health, resigned his position as Director and his worthy successor, Lic. Antonio Martinez Castro took over for 2 years without pay. In spite of his short stay, Lic. Castro managed to increase the teachers' salaries and to tie in the school's program with those schools of similar type in other countries. In 1878 Lic. Castro resigned and Dr. Manuel Dominguez took over. He served with-

out pay at first, but in 1878 the government considered it justifiable to allot him a modest salary. In his book, "Brief History of the Blind School," he states that teachers were assigned to primary instruction: reading, writing, music, carpentry, printing, book binding, and gymnastics for the boys. The work was distributed as follows: 3 hours in the morning for instructive education, 3 hours in the afternoon in the workshops, and 3 hours in the evening for music.

In the same book, Dr. Dominguez states that the result of the public examinations given his pupils was satisfactory, and that the work done in the shops was sent to the Paris Exposition in 1889, where prizes in the form of medals and diplomas were given. He also states that the musical group formed by the pupils was asked to play in diverse parts of the Republic. especially at industrial expositions. During this period the general condition of the buildings improved and personnel and pupils increased, all of which made for an improved organization.

When Dr. Dominguez resigned, Dr. Juan Ramirez took charge, from 1898 to 1915, during which time the former organization continued but the musical and instructive education were intensified.

The progress of the School for the Blind can be noted at this time by the fact that the Board of Directors of Beneficencia was increased in number, and that this Board decided to send Mr. Manuel Acosta, a university professor of the Normal School of Mexico, to visit the existing schools for the blind and the deaf and dumb in the United States. On his return, Mr. Acosta gave a report on the schools visited in New York. With this report in mind, the Board of Directors decided to change the building, notably bettering conditions of hygiene and space. At the same time, the School for the Blind was moved to the new building, the School for the Deaf and Dumb was given part of the same building at Mixcalco 6.

In 1929, Dr. Edward E. Allen, wise and distinguished director of Perkins Institution for the Blind, of Watertown, Massachusetts, who in 1920 had organized courses for American and alien teachers who wished to specialize in the education of blind children, heard that his friend Dr. Samuel Waxman, professor at Boston University, was making a trip to Mexico. Dr. Allen took advantage of this opportunity to ask Dr. Waxman that everything possible be done so that a Mexican teacher of Normal School training, with wide experience in teaching primary grades be sent to Watertown on a year's Scholarship for special studies in the education of blind children. Dr. Waxman interviewed the noted Mexican educators, Miss Juana Palacios, graduate in philosophy of Boston University, and Directress of the Normal School for Post Graduates, dependent on the National University of Mexico. Miss Palacios took extreme measures to see this through, and chose me, a former pupil of hers.

The measures taken by Miss Palacios in the Directors Board of Beneficencia coincided with the interest she had in improving the educational work in the School for the Blind, and she added her economic help so that the chosen teacher went to Perkins Institution, where she remained as a boarder for one year, acquiring workable suggestions and valuable experience. Returning in 1930, a report was rendered to the Board of Directors, with motion pictures showing the activities and education at Perkins. After a period of study and observation in the Mexican School for the Blind, I was named by the President of the Board of Directors, Prof. Moises Saenz, as Technical Director of the School for the Blind, with an organization similar to those of all primary schools: Kindergarten and six primary

grades. The same scholastic program and studies were followed as in other schools, with slight changes adaptable for blind students.

The success obtained during this period was due principally to two facts:

1. The Secretaria of Public Education interested in this work commissioned five young teachers to help with the work. These teachers by their enthusiasm and dedication brought about a better distribution of the students and facilitated the individual work which is so necessary when teaching the blind.

2. Mr. Ramon Beteta, then head of Educational Action of Beneficencia Publica, who had always acted with interest in the work with the blind, was commissioned to attend the World onference on Work for the Blind, in April of 1931, and the information and experience gained from this visit, reaffirmed his convictions which were put into actual operatiion at the National School for the Blind.

The teachers quickly learned the system of reading and writing Braille. Intelligent observation by these teachers made them understand that the pathological bases of educational activities with blind children are the same as those with seeing children, except for the difference that with blind children one must stimulate the sensory perception automatically received by those who see, so that motor and tactile activities are intensified by the frequent handling of objects, and at the same time the language is enriched by naming the objects handled.

All these exercises begin with kindergarten, predominating in the first two grades and with the tendency to accomplish a greater reflexive thought in the following grades.

Kindergarten is an indispensable preparation for blind pupils. There they get sensory training, manual dexterity, orderly habits, precision and attention, freedom of action, and grace of movements, thus taking advantage of the time of life when a child acquires through the senses and with adequate stimulus, the greatest sensory perceptions and associations that united with reflexive thought permit the knowledge of things. Then he also acquires the ability to do things by handling objects and constructive material of different sorts, especially of plastic, thus acquiring experience based on knowledge.

Keeping these things in mind, a program has been developed for the kindergarten as follows: songs, dances, stories, talks, outdoor games, indoor games, modeling with clay or plasticine, domestic occupations, sewing, forming, cutting and knitting. In reference to usual scholastic studies included in the primary program, they are the same as in all public schools. The national language is studied from the first grade in all aspects: oral and silent reading, Braille writing, penmanship, grammar. The teachers have tried to cultivate the language with oral exercises, intensifying these with perspective exercises. Arithmetic in the lower grades is taught by games in keeping with the life and nature of the children, and the necessity to make them future members of society. Mental exercise is given, also perspective material, the same as in other schools.

Elementary geometry, and later advanced geometry, are taught by the observation of surrounding objects of geometrical shapes, also with figures and forms made of cardboard, and submitted to the touch.

For the systematic study of geography and history, Braille maps are made. These maps are constructed of plasticine or clay, by the pupils, from information gathered on excursions. These excursions not only serve as outdoor exercises but also puts the blind pupil in contact with the physical and social world that surrounds him.

The study of Nature is considered very important because it awakens interest of the world in which the blind live. Nature study also brings the knowledge of objects and wonders of the outer world with its multiple beauties. It also shows the importance of nature with regard to man himself. Pupils handle seeds, common materials such as wool and cotton, etc., which serve for relative associations with biological phenomena and the germination of plants.

Visits to factories have been started and excursions to local interesting and educational spots. Here seeds, plants, leaves, etc., are gathered for study. Studies requiring mental activity, are balanced by manual work which is very important in the education of the blind.

Great attention is given to the boys' physical education and a course of physical culture for girls is given also. To these are added special gymnastic classes, dances and excursions. As yet the school has no swimming pool, a great need, as swimming is one of the best forms of exercises.

In domestic science cooking, washing, ironing, etc., are taught. Sewing begins with simple basting and pulling threads, and continues until the pupils learn to make their own clothes. Some girls are taught to sew on machines. Knitting, crocheting, framework with thread, soutache, wool and waste goods are learned. To make students appreciate their work tests are given. These tests serve also to classify the groups.

Examinations are given every semester or trimester, mainly to judge the progress made by the pupils and to compare this progress with the scholastic program, promotion examinations are given These examinations are prepared by the Secretaria of education with the necessary adaptation, and transcribed into Braille.

Music lessons—piano, violin, guitar, etc., retain the same former organization and the orchestra always brings in money since its music is in demand.

The original library formed in the early years of the foundation of the school has been increased with transcribed Braille volumes of books by good authors. This has advanced slowly because Braille transcribing by slate requires so much time. Many students became interested in increasing the volumes of reading material and asked for a Braille printshop.

The creation of a Secretaria de Estado called Salubridad y Asistencia Publica took over the duties of Beneficencia Publica. At this time the Director of the School for the Blind was Dr. Angel Vallarino. The school underwent a new organization, ceasing to be a boarding school, and former boarding pupils were transferred to private homes in small groups of from 10 to 20. It was felt that in this way they would enjoy a real home atmosphere and would improve the morale of the children. These homes are situated near the school and are under the surveillance and direction of an older person who acts as head of a family. It has been proved that this way of forming homes for the children gives them a firmer social basis. At the time these homes were established, scholarships in the form of economic help were given to those pupils who could live with their own families.

The adaptation of these pupils to the social system as far as economics go, depends greatly on their being able to support themselves by some type of work which at present includes: music or the orchestra, tuning and repairing of pianos, massage, and the making of soap and brooms. During the last few years the hammock making industry was initiated. These hammocks called Yucatan hammocks, are made of three different fibres.

This work greatly helps manual dexterity. The first looms for making the hammocks were donated by ladies of the American Red Cross. Last year looms were bought for the weaving of blankets, rugs and other articles, which are being sold. All this work helps, but it is hoped that it can be increased to the extent of freeing these pupils from poverty.

In order to help the socially weak the Secretaria of Education Publica founded a specialization school for post graduate teachers who wanted to work with blind, deaf and dumb, and mentally retarded children. These courses were held in the above schools in order to give the teachers greater opportunity for study and observation at close hand.

The Association "Ignacio Trigueros," an organization made up of blind men, possessed a Braille printing press, and in 1941 the Secretaria signed a contract with the organization to print Braille textbooks. The school has received many textbooks during the last few years and this has greatly facilitated studies.

In 1942, the Junior League of Mexico City asked for and was given the authority from the government to establish a library in the School for the Blind. Books for this library were transcribed by members of that organization or brought in from other countries. A reading room was also installed with a radio and talking book. These two rooms are easily reached by all blind pupils and other blind people, and have a determined time schedule. They are under the supervision of directors paid by the Junior League. The advantages of cultural programs, special lectures, books not yet transcribed into Braille, English classes given by League members, games of dominoes, and chess, are many. This intelligent and effective help given at the School, which favors and urges on the education of the blind, has been generously given. Radios for the homes were given one Christmas by the Junior League. This year breakfast for the poorer students was started by the League.

In brief, the altruistic attitude and collaboration of the Junior League has brought more culture, spiritual and moral elevation to the students and all blind people and helps them to become properly fitted for society.

A PHILOSOPHY OF EDUCATION FOR THE FUTURE

DR. C. F. ARROWOOD
University of Texas

President Allen, Ladies and Gentlemen:

As I consider the subject anounced for this paper, and recall that it is a part of a symposium on, "New Horizons in Education," I am reminded of a story which a friend of mine tells. This friend was once upon a time, a member of the staff of a distinguished university in New England. Among the students in his classes, there was a young man who had for some time been seeking admission to candidacy for the degree of doctor of philosophy. Now at the university of which my friend was a member, first steps leading to admission were as follows: The aspirant chose a topic of investigation, upon which he proposed to write his doctoral dissertation. Having chosen his subject and formulated his plan of investigation he would then approach a member of the staff in whose field of teaching and study the student's problem lay, present his

topic and a statement of how he proposed to study it, and ask the professor to propose him for candidacy and guide his work. Shortly after my friend had joined the staff, this oft-disappointed but ever-hopeful aspirant approached him, asking that my friend guide his work. He proposed a thesis topic, however, of such enormous scope that my friend felt that he must warn him of the impossible difficulty a subject of such magnitude imposed. He said, "But my dear Sir, isn't that much too large a subject? I must remind you that libraries are filled with books written about this topic, which you propose to treat definitively within the limits of a doctoral thesis. Really, isn't it a very big subject?" The aspirant drew himself up proudly. His eyes flashed with enthusiasm, "Yes, Doctor," he answered, "it is a big subject. It is a **great** subject and worthy of my best efforts."

Like the aspirant, I've let myself in for a subject worthy of anyone's best efforts. Fortunately, however, I, unliike the writer of a thesis, have no commitment to a definitive treatment. I am allowed to indicate and sketch, and to leave a challenge with my hearers. The task that I have set for myself, therefore, is to state, as clearly as I can, and as fully as the time allotted me will allow, a set of principles which define the perspective of an educational philosophy. Such a statement to be sure, falls far short of being a fully developed system, or of having the worth of such a system. But, brief as such a statement is, I hope that it may supply in some small measure precisely the best thing any philosophical study can give; namely, a fresh way of looking at our problems, and a new orientation with respect to them. This, then, is what I am attempting: to state a set of principles which furnish the framework of a philosophy of education for the future.

1. The first principle which I proposed is this: A philosophy of education for the future—any philosophy—is an intellectual enterprise. It must hold, as cardinal tenets, that the human mind is capable of attaining truth and that loyalty to the truth is the supreme loyalty. The philosopher's faith in knowledge is the central feature of his creed, he stands with Socrates in holding that whatever else may be called into question, we are better and braver and less helpless as we seek and follow the truth. The very word, philosophy, commits us to this quest, for the term is derived from two Greek words, the one meaning to love, or to seek to possess or to yearn after, and the other meaning understanding or truth. So that the philosopher is one who loves the truth, who seeks to possess it and is possessed by it.

Now this loyalty and quest is a very humble and a very reverent undertaking. There are those who when the right of free thought is asserted, denounce such a claim to a right as presumption; who call confidence in reason pride of intellect. I would counter with the flat assertion that to wrap the great human talent, the capacity to think, in the napkin of dogma and bury it in the ground of entrenched patterns of belief is the act of a wicked and slothful servant; and that confidence in reason reflects not conceit, but reverence for the author of all truth.

Consider, in this connection, what is the fundamental article of the faith upon which the structure of science—of tested and ordered knowledge—rests. That article is complete confidence that every event is related in a nexus of events, and that this inter-relation of events is itself an order capable of being understood by human reason, and is itself the expression of an universal law or order. Consider, also, the fact pointed out by Professor Whitehead in his **Science and the Modern World**, that this belief, which he

calls "the greatest contribution of Medievalism to the formation of the scientific movement" was the creation of the great age of faith and religious devotion. He points out that the source of this conception is to be found in "the Medieval insistence on the rationality of God."

To open one's mind to the truth and to act upon it is the truest reverence, the purest faith, the highest duty. That this is true is known to every creative scholar, for well does the research scholar know what his attitude in relation to evidence, to the facts, must be. He must, as he approaches his facts, become as a little child, of a teachable spirit. He must serve the truth with the devotion of a priestess of Vesta to the sacred flame. No one knows better than he that, to the degree to which the book of science grows beneath his hands, he is the happy and fortunate seer, before whose wondering eyes are set the truth and beauty which all who seek shall find. The truth is no private possession of his. His is but a happy place in that great company who knock and the doors to knowledge are opened.

There is a particular urgency in the present age that we pay particular attention to this matter of utter loyalty to the truth and of complete devotion to the growth of knowledge. In the first place, our century has witnessed in Europe a rather wide-spread scepticism with respect to knowledge, and a considerable amount of anti-intellectualism in our own country.

Retreats from intellect to such systems as existensialism, or to systems which furnish, as does Gentile's late work a rationalization of authoritarianism have been prominent features of the intellectual history of our generation. Curriculum building in America has been profoundly affected by distrust of logic and of the logical organization of subject-matter.

Now each of these tendencies is offered as a corrective of some ancient abuse. The authoritarian of Fascism was offered as a corrective of anarchy—the revolt against logic in the schools asserts its opposition to a deadening formalism and a desire to equip young people to adjust in a world of action. There has been, in each case, a condition that did need correcting and an important element of truth in the course pursued.

There is, for example, this element of truth in the revolt against the logical organization of subjectmatter. Knowledge is not an end in itself. It exists for action. And this leads us to the next principle of a philosophy for the future.

2. This is the second principle of our philosophy of the future: It is the role of philosophy to direct action. The philosopher does engage in contemplation, in reflection, but he thinks in order that he may act. He does attempt to see life steadily and to see it whole, and so arrive at principles which are enduring—but the enduring character of these principles consists precisely in this, that they furnish norms or standards of use in directing and evaluating action.

It is this, the second principle, which defines our philosophy as a philosophy of the future, and which gives point and meaning to our first principle: that the philosopher seeks knowledge, and has no loyalty above his loyalty to truth. The philosophers quest has meaning only as he collects data and learns to so interpret them as to acquire insight into their relations; and this is in order that he may formulate general principles under which the course of events can be described. As he acquires this knowledge of principles he develops foresight, and can increasingly foretell the consequences of natural events and of human action. By virtue of

this **foresight**, of this knowledge of natural law, he is increasingly master of his own fate, and achieves freedom, dignity and security. I call your attention to the fact that this gives to philosophy a forward look—for where history concerns itself with the facts, of the human enterprise, which are, of course, of events in the past and so beyond being affected by action, philosophy concerns itself with action, which is just about to take place, with the action we are planning, which is in the future.

It is this commitment to a future course of action, based on confidence that there is an order of nature on which one may rely and that reason is competent to foresee and to deal with events which gives character to the doctrine of the nature of truth which I propose. Knowledge, according to this view, is part of the system of activity of human beings. It serves as a stimulus to guide activity, and has been built up in the course of the interaction between organism and environment. It is, then, a matter of phenomena and of the relations between them. Its components are images and ideas. Truth, then, is to be tested, in last analysis, by the nature of the relations that images and ideas sustain to each other: and since knowledge is built up it is limited to the world of sense perception and to the relations which can be inferred from that which is given in experience.

This means that our philôsophy is experimental and is growing. It means that the philosopher is ever learning. He is constantly discovering new horizons. The philosophy of the future is youthful, for the peculiar powers of youth are the powers to grow and to learn.

But you say, if knowledge has this growing character, how can we have standards? What has become in an evolving world, of the normative and enduring element which philosophy is presumed to provide?

3. The answer lies in our third principle. This principle is this: The goal of all human striving is the quickening, enhancement, extension and enrichment of life. The justification of any philosophic thinking is that it makes life ever more abundant. The good life consists precisely in activity and growth; so that as Mr. Dewey points out, Education is the culminating phase of philosophy, it is philosophy in action.

These three principles should hold an important place in the thinking of the teacher of the mid-twentieth century, contemplating as he does, new horizons in education. The mention of these new horizons inevitably brings to mind the rapidly accelerating change through which we are passing—change which has opened before us vistas so vast and new that we characterize them as "new horizons." One hears, from time to time, exhortations that we change with the times. Any urging that we change is quite superfluous—we will inevitably change, and we flatter ourselves if we think for a moment that we can avoid change. The progress of science within the past century has effected social, technological, and economic changes more profound and wide-spread than the world has witnessed in any previous millenium. We are changing. Our problem, then, isn't, Shall we change? It is, rather, this: How shall we maintain direction and preserve continuity through change? How shall we control change, so as to conserve human values and avoid catastrophe? To supply the orientation necessary to keep us on our course as we sail uncharted seas into these new horizons, I offer three principles:

1. Trust your reason seek out facts; check and order them; frame your hypotheses; with fine faith in the uniformity

of nature try them in action; test and test again.

2. **Act** on your **facts**. Away with authoritarianism, and with dreaming. Envision your better world and built it, as those did who "saw a city which had foundations."

3. Respect the uniqueness and dignity of human personality. Take the contribution which any deed makes to the enrichment, extension, and organization of life as your test of its worth.

These principles give no chart of the lands beyond our new horizons. They do set the character of our work if we are to fit the citizens of tomorrow to explore and possess them.

These principles of a philosophy of education for the future furnish us a conception of the school. The school for which this philosophy furnishes the basis is an activity school. It is, moreover, a school that looks to the future—that is to say a school in which activities are purposive—a school in which intellect is trusted. It is, in other words, a progressive school. It is, moreover, a school in which the enrichment of human life is the test of value. These traits converge to give us the fundamental concept of an educational philosophy for the future: That concept is of a type of education which is child-centered—which makes his interests the motivating force of the school, which regards his activities as the significant phase of the educative process.

Our philosophy for the future is child-centered, because the future is the child's. The great task of education is that of conserving our values in a changing world—it is the two-fold one of passing over our gains to each succeeding generation without limiting that generation's freedom to think, to act and to create. There is a story told of a Negro trainer who had, for many years, rubbed tired muscles and treated scratches and bandaged sprains and performed all the various services that a trainer performs, for Sewanee football players. A year or two ago a celebration was arranged in his honor, and between halves of a football game he was called upon the field, presented with a testimonial of the respect and affection of Sewanee men, and interviewed. He was asked: "Which of all the teams you have known is your favorite?'" His answer summed up the philosophy of a mature educator: "My favorite team?" He said, "My favorite team is always the one that's coming up!"

New horizons are before us. We cannot chart the course of our pupils on seas they will sail, for we have never sailed them. To drop the figure we cannot give them answers to their problems, for we cannot know what those problems are. We can educate for the future. And to do it we must teach our pupils to think . . . to rely on reason, to get the facts and to reason rigorously. We must teach them to act, promptly and efficiently, and we must teach them to respect human personality, in themselves and in others. When we have done this, we can front toward our second horizons with confidence in our pupils, "the team that is coming up!"

ADMINISTRATIVE HORIZONS

By
A. L. CHAPMAN
Associate Professor of Educational Administration
The University of Texas

The assignment of the topic "Administrative Horizons" involves limitations and freedom of choice. The limitations are those imposed by an individual being one person. He can usually look only in one direction at a time. He also tends to view some horizons more often than others. The freedom of choice lies in the opportunity to turn in any direction to look at the horizons.

Each of us may view the horizons in a different perspective, many of you can see farther than the limits of my horizon. Within the limitations of time and the limitations of the assigned topics I shall discuss six important, at least to me, horizons.

1. The financial horizon
2. The community school horizon
3. The communications horizon
4. The supervision horizon
5. The child accounting horizon, and
6. The Audio-visual horizon.

Financial Horizon. It appears that education is going to continue to cost more money than in the past. There will be changes in cost proportionate to economic groups. These groups will state simply conditions in the country. I am not thinking of these types of costs, but rather, the costs which will increase due to increased services of the schools. More individual attention to our students will cost more because the per pupil cost will increase. Guidance programs will cost money. All the additional costs relating to keeping the children under the supervision of the school for longer periods of the week and the year are on the horizons. The school plant will require more money. Many new schools are needed.

Concurrent with the increased cost of education will come pressures to prevent increased expenditures of education. that these increased costs are due to the selfish interests of school people.

The Community School Horizon. More and more of our children's time will be under the supervision of the school. The forms of the community school, or the year-round school are clearly seen. School people can expect that there will have to be made some provision for the educational supervision of children during the summer months. The school will not be a continuation of the regular school activities, it will include much health and physical education, arts and crafts, reading, dramatic activities, some specialized regular school activities, and the like.

The Communications Horizon. Administrative officers are going to have more concern with communications than ever before. They are going to be making provision for people in our complex democracy to learn techniques of communication. Administrative officers will make specific use of all of the best information available concerning methods of intercommunication between the school and the community. More emphasis will be placed upon public relations and upon the use of public opinion polling.

The Supervision Horizon. Much has been written and a little has been done about what is sometimes called "Democratic" supervision. Supervision will continue in this direction. More supervision will take the form of leadership, stimulation

of group activity, inservice growth, group planning.

The Child Accounting Horizon. As the individual child gets more specific attention and becomes "Johnnie" rather than one of a herd of children passing through the corridors there will be need for much more information about "Johnnie" than most schools now have recorded. Records will be keyed to the guidance program and to the functions which the records serve. The records will show much more anecdotal material. The growth and development of each individual will be depicted in a meaningful manner without overburdening teachers.

The Audio-Visual Horizon. The civilian and military uses of audio-visual materials in instruction have shown their value. One of the big problems facing administrators is getting these materials used. Administrators will be working toward making it "easy" for teachers to use audio-visual materials. When this problem is solved there will be more widespread usage of audio-visual materials. The nuisances connected with using these materials have not been removed, but the methods whereby these nuisances can be removed are on the horizon.

In the field of radio, administrators are going to make it possible for teachers to use radios in their instruction more than ever. Particular attention is going to be focused upon discriminate listening.

NEW HORIZONS FOR THE CURRICULUM

By
J. G. UMSTATTD
Professor of Secondary Education, University of Texas
and
Co-ordinator of Texas Study of Secondary Education

There is no need devoting your time and mine to statistical proof of the need for new horizons in education. The story of educational shortages has been told in the editorials and articles in every leading newspaper and magazine in America. You are fully aware of the facts that tell of thousands of children either out of school or even worse off in classrooms with ignorant and otherwise incompetent teachers; facts that tell of the resurgence of prejudice, intolerance, greed and other tendencies unleashed by war in some of our states at the time when the world's very existence depends upon the application of the fundamental principles of Christianity; facts that picture clearly the controversy over what should be taught in our public schools and institutions of higher learning. Informed public school men and women already know these facts which in the aggregate suggest the distance America must go before we can establish our claim to democracy. Certainly these facts slap the steel gauntlet against the cheek of the educator. So long as there is a single child of any color or creed denied the full opportunity to learn established truth in publicly supported schools under competent teachers, the democratic way of life is challenged, and when democracy is challenged every person who deserves the name educator must accept the challenge.

The question which concerns us today is, How may we meet the challenge? What are the new frontiers that must be established to widen our educational horizons?

First, if public education is to perform the tasks which society is now demanding of it, the school year must be increased from nine to twelve months, with short vacations centering around national holidays and consuming from four to six weeks in the aggregate. Although this audience is very likely already in agreement with the proposal that the public school program should run the year round, three basic reasons why a twelve-month school year is imperative may be mentioned:

1. The curriculum of our public schools is already over-crowded. We are attempting to do too much in nine months and consequently we are not doing it too well.
2. Many urgently needed educational activities have not yet found adequate places in the curriculum as, for example, health and physical education, the fine arts, and work experience.
3. A very large percentage of children and youth have nothing worth while to do during the long summer vacation and consequently many of them drift into socially undesirable activities.

In setting up a twelve-month school year several principles should be observed. Among these are:

1. The amounts of the academic, the fine and recreative arts, and the vocational—including work experience —should be allocated to fit both the seasons of the year and the varying capacities and purposes of the pupils. This principle does not mean that during the winter months the program should be largely academic, or that work experience should be limited to summer months. Rather it suggests that, during each month of the year there should be optional amounts of the academic, the fine and recreative arts and the vocational, but that the amounts of each should vary by seasons as well as by pupil ability and purpose.
2. The fields of learning now handicapped by lack of time should receive more of the added time than the fields now adequately treated, though the added time for such fields should not be limited to the summer. For example, health and physical education must be pursued throughout the entire year to be effectively learned and applied.
3. At least for several years, provision should be made to permit pupils who regularly follow wholesome developmental activities during the summer to continue those activities. In this category would fall pupils who take trips with their parents, those who work on farms or elsewhere, those who attend summer camps, and others.
4. As is now the case with our nine-month program, in the development of the twelve-month school year those parts of the program should be deleted that serve no worthy purpose, and the time now wasted on them should be devoted to worthwhile experiences. Although drill will always be an important method of learning, one of the first educational experiments, that conducted by Dr. Rice in 1899, showed the futility of the spelling grind beyond a given point. More recent studies have shown similar results for other subjects. Studies of college entrance requirements have removed the halo from the traditional pattern of high school subjects. Careful study should precede the deletion of the parts of our program that are worthless or even detrimental and experiences of

value should be substituted for them.

There will always be some schools that will take the lead in educational extensions. They may be counted upon to do so with the twelve-month school year, granting permissive legislation. Perhaps such an experimental beginning is after all the soundest approach. Several Texas school systems have already begun pioneer work with the twelve-month or year-round school term.

A second extension of the public school frontier which should come soon is the provision of early childhood education and post high school education for all, in addition to the typical twelve-year program, beginning at the age of four and extending sixteen years to the age of twenty. The research centers on early childhood education, such as those at the Universities of Iowa and Minnesota, have demonstrated the value to society of various types of pre-school education for the normal development of children. Childhood education from the ages of four to six should become a regular part of public education, particularly for, though not limited to, children from the less privileged homes. At the other end of our typical twelve-year program, the junior college is already meeting the needs of many late adolescents. Some high schools are in effect giving a fifth year of work by requiring twenty units for graduation. Thus the post high school program is already emerging. But it has not yet reached the mass of youth in our rural areas where some plan similar to the one suggested for Farmville in **Education for All American Youth** is needed rather than the typical junior college. This plan extends the senior high school two years rather than setting up a separate two-year institution but provides for college-going students to leave for college at the end of grade twelve. The public as well as the educator is substantially favorable to the upward extension because such extension has already proved its value widely throughout America. The downward extension into two years of early childhood education, while of merit at least equal to that of the upward extension, has been less publicized and will require a longer time for universal establishment as a part of the public school program. Both are needed to round out the American public school.

A third development of great promise, one which deserves rapid expansion because of its value to those whom it serves and through them to society in general, is the educational program for out-of-school youth and adults. A very large percentage of youth of high school age are not in high school. For example, a recent survey of one large Texas city showed that only 47.1 per cent of white children of senior high school age were in public school, while the comparable figure for Negro youth was 39 per cent. Even after allowances are made for attendance in private schools, for those who have finished high school, for the subnormals and other groups, it is quite clear that a surprisingly large percentage are not being reached by the school program. A similar situation prevails throughout America. When unemployment stalks the country again in a few years, as it probably will, the problem of out-of-school youth will again assume the gigantic proportions that it reached in the mid-thirties when the C.C.C. and N.Y.A. were established to cope with the problem. Now is the time for local schools to extend their program to serve their youth who have finished or dropped out of high schools. It is far better for this work to be done by the local school, with state and perhaps federal aid, than for it to be done by federal agencies.

Adult education as the term is ordi-

narily understood should be recognized as a part of the public school program. Why should there not be in every public school system a local center of continuation study for adults? Numerous school systems already have the program under way but here again the smaller communities are suffering. Texas, along with most of the other states, has barely explored the program of adult education. We have now come to the time when our nation can no longer afford to have such a large mass of its citizens live in ignorance for the simple reason that the prejudices bred of ignorance will wreck any plan for world-wide cooperation for peace. Added to this pressing need, are the needs for adult education that arise from technological advancements and their accompanying sociological developments. A well-considered program for the further education of out-of-school youth and adults should receive proper study and appropriate action by local school systems of all sizes.

The extension of the school program to include pre-school and post-school groups will require additional plant facilities to accommodate the new program. Throughout the old buildings as well as in the additions, many changes from the typical plans for school lighting, seating and decoration will have to be effected to bring the plants abreast of the research in these important areas. The recent researches on school plants are highly significant but a discussion of them is not at the moment in order. Let us instead continue with our present subject—new horizons of the curriculum.

As used in this discussion the term curriculum means all the educative experiences provided children and youth by the school. The curriculum of the public school has already been extended almost to the breaking point. The greater or at least the prior need of the curriculum is reorganization rather than extension. Even though reorganization, preferably on the five core-area plan of the Texas Curriculum Program, should precede further extension, some extensions may accompany the steps toward reorganization. In discussing the needed curricular extensions, let us bear in mind that their complete fulfillment will require the twelve-month school year referred to earlier.

Two wars have supplied ample arguments for great and realistic extension of health education and physical education. One is puzzled when he observes intelligent people who by their words and actions seem to imply that physical development can be acquired vicariously while studying about the glories of antiquity. If we want to take a lesson from the ancient Greeks, and I think we should, let us glorify physical development as they did by making it a central part of the educational program. The Greeks developed their bodies, not by reading about the glories of Babylonia. Let us extend our high school graduation requirements by including, along with reasonable academic attainments, a series of physical and health standards such as the following for both boys and girls, excepting only those organically unsound:

1. The ability to swim a specified distance.
2. The attainment of prescribed standards in coordination and balance, standards which take into consideration the individual's initial score on tests of motor ability.
3. Prescribed proficiency in at least five recreational activities, appropriate to the sex of the pupil, that have carry-over value, again taking natural ability into consideration for each pupil.
4. Evidence of having applied a specified number of sound health habits

consistently over a specified period of years.

Perhaps the specialist in health and physical education might wish to suggest standard somewhat different from these four, but they will serve to illustrate what is meant by realism in the development of physical prowess and good health. Our thinking about physical development has been cursed long enough by the medieval theology that caused man to consider sinful anything that pertained to the body. It is time to discard our distorted thinking on this subject and to give a central place in our curriculum to the development of sound bodies.

Another needed curricular extension, the importance of which was emphasized by the war, is that of work experience. A year-round school program should provide time throughout the year for part-time work for a large portion of the secondary school students to give them the sense of responsibility, the sense of values, the social intelligence, and the opportunities to apply what is learned in some academic fields which come from earning on a job. Work experience should be placed on permanent records as educational activity. The methods by which any school can organize a program of work experience were demonstrated during the war. Even earlier the methods of organization had been developed by several of the vocational fields, particularly the field of diversified occupations.

A third extension of the curricular horizon that is being made by many schools and deserves to be made by all is within the social studies. Here in particular reorganization is more essential than large extensions but some additions are needed. Incidentally it may be noted that many well developed home room plans in high schools are in reality extensions of social studies and sometimes include the most important aspects of the field, those pertaining to social and personal adjustment of value to youth in their day by day living. Of wider significance are the responsibilities placed upon the social studies by the aims of the United Nations. A very large portion of the program of education for peace rests upon the social studies. If the defenses of peace are to be built in the minds of men, our social studies program must be extended to combat prejudices of all kinds; to give clear understanding of all peoples of the work through study of their ways of living, their literature and their contributions to civilization; and to apply the other practices soon to be recommended by UNESCO. Also, within our own country the sheer distance between our present status and the goals set for a democratic society by our own Bill of Rights and by the Charter of the United Nations is that of giving our pupils ample opportunity to learn the precepts of democracy, to observe democracy in action both in the administration and in the instruction within the school, and to participate constantly in the procedures of democracy. These great tasks that have been set by the United Nations and by our own national ideals will require that social studies and their allies in the humanities be given a considerably greater place in the curriculum than they have had up to date. The challenge is before us to discipline ourselves with the kind of education that will enable us to live in mutual respect and peace with our neighbors of all races, classes, creeds, and nationalities. For this task to be performed successfully, social studies in all probability will have to be made the core of the curriculum.

Still another needed curriculum extension, one which is closely related to social studies and not unrelated to physical education, is within the fine arts. The need for extension in this general area of the curriculum is not limited to the establish-

ment of desirable leisure-time pursuits. Extension of the fine arts is needed to an even greater degree to combat the materialism of our industrial age. Furthermore, inasmuch as each of the fine arts is a medium of self-expression and as such a means of communication, extension in the fine arts is needed for personal development and social intercourse. As these values are recognized by more and more educators and other citizens, we may expect additions to our programs of art, music, dramatics, creative writing, speech, and the dance. Each of these subjects has its unique contribution to make toward our aims of education.

The four curricular extensions just discussed for the fields of health and physical education, work experience, social studies, and the fine arts are the most needed extensions for general application to all or practically all elementary and secondary school pupils, with the exception of work experience in the lower grades. These and extensions in other fields already made by many of the larger elementary and secondary schools are sorely needed by pupils in the smaller schools. This need of the smaller schools becomes alarming when it is realized that in Texas, as in many other states, the proportion of small schools is much greater than is ordinarily supposed. The median high school for the United States probably has from 150 to 175 pupils while in Texas in 1945-46, 960 of the four-year high schools, 69 per cent of the total, had fewer than 75 pupils. Approximately one-third of the four-year high school pupils in Texas are in high schools with fewer than 150 pupils. In a very real sense, the small school has been ignored in our new advances in education. One rather large aspect of the problem of the extension of the educational program, therefore, is that of extending the present large-school educational offering to pupils in the smaller schools. The most obvious method for solving this phase of the problem is consolidation. Another method, the merit of which has been established in at least one western state, Nebraska, is that of supervised correspondence study for pupils in schools of limited offering. Both methods will require wide application before the liberal offerings in the large schools will be extended to an appropriate degree to the pupils in the many small schools.

Within any school community, whatever the size, there are usually some children to whom the usual offering is little or not at all adaptable. These children include the unusually brilliant, the mentally retarded, the physically disabled, the specifically talented and perhaps others. For such children, equality of educational opportunity does not mean the same offering that is given the other children. Instead, it means the offering from which each can receive maximal benefit. While many schools have well-considered programs for exceptional children, other have not yet even identified such children among those under their care. Further extension of education to these groups should not be longer delayed if they are to have the square deal which is a part of our American philosophy.

In every region of America, in every community of every size and type, if social justice is to be more than an abstraction, the same quality of educational opportunity that prevails for the dominant group must be extended to the minority groups. That community would be rare indeed that could substantiate the claim that it does not discriminate against minority groups in its educational program. The discrimination is not limited to racial or religious groups; it is often directed toward the less privileged members of the dominant group. The self-righteous community which boasts of its tolerance in

racial or religion matters, usually because it lacks racial or religious minority groups, is often as cruel in its educational discrimination against any people who live across the tracks as it accuses other communities of being against their racial or religious minority groups. If one were to assert that this is a national problem, which it is, that assertion would not be made to whitewash the deplorable situation which exists in some of our Texas towns in their discrimination against the Negro and the Latin American. The facts of this situation are too well known to need rehearsing here. Some boards of education are said to boast of results they get for their dominant group by discriminating against minority groups. It is a crime against the future of America, one that approaches treason, deliberately to keep any segment of our population in ignorance through discriminating against that segment in our educational program. The least that should be done to rectify this condition is to withhold state funds from boards of education that practice discrimination against minority groups in their educational programs. Reference is here made to boards of education because of their ultimate authority, but it should be made clear that in this problem the skirts of some school administrators are not entirely clean. Either let us now stop giving pious lip service to democracy or let us take immediate steps to extend the program of our schools to persons defined as citizens by our federal constitution but who are at present through deliberate discrimination are being denied equality of educational opportunity, that prime right of American citizenship.

There are other curricular extensions and modifications that are needed. Nothing has been said, for example, about some of the subjects which you like best, but you are reminded that several subjects are already favored in the curriculum. Each of these should be extended to include newly established facts in its field and each should be drawn upon more and more to help meet the personal and social problems of today and tomorrow. For example, in passing, one need for the extended use of mathematics may be mentioned. Every pupil would receive much value in college and elsewhere if he were motivated to the importance of arithmetic. This motivation should not be given the kind of mathematical madness that stalked through our schools during the war and caused them to require for graduation two or more units of mathematics beyond arithmetic. Instead, the motivation should come by informing the pupil of the values to be derived and then affording him the opportunity to re-study his eighth-grade arithmetic book and to pass stiff standardized arithmetic tests periodically throughout his high school career, one in his last semester.

Since it is impossible to divorce curriculum from method, let us devote the remainder of our time to some consideration of new horizons in method. World War II publicized four aspects of method which educators had previously developed and which **school men** in the service were given unlimited funds and complete freedom in their use. In each of the four cases, the results justified the expenditures by contributing immeasurably to the winning of the war, and their full use in the public educational program as extensions of method would be equally effective in the accomplishment of the task which faces American education. The first of the procedures emphasized in the Armed Services is the extensive use of mechanical aids to learning, both visual and auditory aids. If we are to make the most of this lesson learned from the war, every classroom and laboratory should be fully equipped with appropriate equipment and supplies for visual and auditory educa-

tion and every teacher should become adept in their use.

Realism is the second aspect of method of teaching that was emphasized in the Armed Forces. If there had ever been any doubt about learning by doing, the training program of the Armed Forces removed the doubt forever. Physical training was severely realistic, perhaps too much so. Men learned to handle weapons by handling weapons. Infantry and artillery problems were worked out in the field after classroom study. The mathematics of navigation was applied in the air. And so on, every idea and act learned was put into practice in the most realistic manner possible. The method of realism, which is closely akin to visual education and the laboratory procedure, should be extended to every classroom.

A third lesson in method the War taught is the value of the direct method and the laboratory in language teaching. Through these two aspects of realism in language teaching, unprecedented results were achieved in the learning of languages. If languages are to be learned effectively, and unless they are fully learned their study is largely a waste of time, each language should have as much laboratory time devoted to it in addition to the regular class hour as is now devoted to a physical science, and the rooms should be equipped with auditory and visual aids equivalent to the equipment and supplies in the chemistry or physics laboratory.

The fourth aspect of method emphasized during the War was that of individualized instruction. This problem was solved by grouping students, with one of them acting as leader, and by limiting the size of the class. We in education have been talking about individualization of teaching for many years, and we have made some headway in it, but the Armed Forces achieved it thoroughly. The navigation instructor, for example, in the critical part of his teaching had at most seven men in his element, and this number was reduced to three in the practice phase of the training. Each flight was followed by a severe critique or individual conference. And the instructor spent all his time with his one small group. He did not have five or six such groups throughout the day. The extension of individualized instruction in our public school program will first require a drastic reduction in class size. But reduction of class size will do little good if the teacher continues to use his methods of mass instruction. Therefore appropriate mastery of new methods should accompany reduction of class size. If the finer techniques of teaching are to be used, the size of class both in the elementary school and in the high school should be limited to twenty pupils.

Other extensions of method, in addition to the four learned from the War, should be made. For example, few teachers are able to use the library as effectively as it might well be used, either because the library is poor or because their education courses have not taught them how to use the library facilities. Here is a problem of method that deserves full consideration.

Another important extension of method lies in the field of mental health. For a long while, many educators have suspected that some of our school practices have actually impaired the mental health of some children. For example, the imposition upon all children of a marking system designed for the average or above dooms some children to frustration and failure. We know that cases of dementia praecox have occurred in our school population which could have been prevented by proper detection of early symptoms followed by adequate treatment. We know that the depression and our total war have caused serious impairment of the mental health of thousands of children.

Knowing these facts and many others of similar nature, we have in the main disregarded them in our methods of mass education. To extend the principles of mental health into the school program of the nation will require first a teacher-education program that takes fuller account of mental health; second, a deeper understanding by administrator and teacher alike of child and adolescent nature; third, the addition of trained psychologists to our public school staffs; fourth, the establishment of child guidance clinics in local schools of adequate size; and fifth, the establishment of the long-recommended county psychological clinics for service to smaller schools. In a nation recently in a total war, in one which is also subject to the severe tensions of the speed mania and a system of keen competition, such as ours is, the problem of mental health in schools should receive serious and immediate consideration.

Again, far too few teachers understand how to teach children to read and to study in their respective areas of teaching. The application of methods of teaching reading and study should not stop at the end of the elementary school because new types of reading and study are needed for each succeeding year of formal education, even through college and graduate work. Many children fail because the teacher has failed to teach them how to read and to study in his field of work. Here, then, is yet another extension of methods that is sorely needed. Each teacher in his own field of work should teach the pupil the peculiar skills in reading and study that are essential for the successful pursuit of that field of learning.

One final point in the field of method may be mentioned. It relates to ways of teaching the brilliant student. At present the exceptionally bright pupil is often treated much the same as the average pupil for whom our program in the main has been designed, or perhaps he is permitted to take additional subjects with a view to graduating even earlier than he otherwise would, a practice not without some disadvantages. In many schools the bright child receives much less intellectual stimulus than he should receive and frequently learns the vicious habits of loafing and getting by without effort. All schools should follow the practices of many schools in identifying the pupil of greater brilliance and mental maturity and then leading him into intellectual pursuits far above those designed for the average child, with little or no thought of his working for the credit. A little initial inspiration followed by guidance as needed are the chief techniques to be followed. Once started on his path, the brilliant student needs more letting alone than most teachers are able to give him. For example, he should never be forced to attend classes in subjects in which he already knows more than will be taught the other pupils. The extension of methods of learning for the superior student is a unique problem and one of considerable importance.

Before concluding this discussion, there is one extension that should be called to your attention that relates to both curriculum and method. It is the problem of general evaluation. Many school systems have used the **Evaluative Criteria** in the junior and senior high schools, and many have used the **Handbook for Self-Appraisal and Improvement of Elementary Schools.** The extension of evaluation that is here proposed is that the entire program of the school system be evaluated. It is well known that in the past the secondary schools have stolen money from the elementary schools, all over America, in order to qualify for membership in their regional accrediting associations such as the North Central and the Southern Association. It is equally well known that the dominant group has discriminated against the minor-

ity groups at all levels, all over America. The proposal now being made is that every school in the school system be evaluated in the total program of evaluation. In this connection, the Southern Association recently adopted a recommendation made by its Committee on the Use of the **Evaluative Criteria** to study this problem during the next three years, possibly with a view to building a set of criteria, in cooperation with elementary school leaders, for the evaluation of the entire school program.

The question may well be raised as to whether or not a high school in any school system is eligible for membership in an accrediting association if that system has built its high school for its dominant group at the sacrifice of all other parts of its program. The value to our American society of this extension of our evaluation of schools to cover the entire system would be beyond calculation in several generations.

In conclusion, your attention is recalled to the reference at the outset of this discussion to the well-known facts about education which in the aggregate suggest the distance we must go before we can lay just claim to having a democratic order. Desirable extensions of our program of public education in the fields of curriculum, method, and evaluation have been at least roughly sketched on your consciousness. Some items which you have in mind have not even been mentioned. But the suggested new horizons give one person's view of the way to meet the challenge through enlarged service. These extensions of our service should enrich our lives and the lives of all whom we teach, and they should help us bring to America, our dream of democracy.

GREETINGS FROM VENEZUELA

MARIO FLORENTIN

Mr. President, Fellow-Workers:

The Board of Directors of the Society of Friends of the Blind and the staff of the Venezuelan Institute for the Blind have charged me with the pleasurable mission of bringing to you their cordial greetings, together with their best wishes for the complete success of this convention.

My presence at this fine convention gives evidence once again of the constant interest of the Society of Friends of the Blind (founder of the Venezuelan Institute for the Blind, of which I have the honor of serving as Superintendent), in the complete solution of the educational and social problems of those deprived of vision.

Gentlemen, it is for me a great privilege and a high honor to serve here as one of the exponents of the good will with which my country is always ready to back up your efforts, to co-operate in every attempt which has as its object an increase in the cultural interchange between our institutions, and to make even closer the bonds of friendship, brotherhood, and sincere co-operation between our schools, as well as between all the peoples of this hemisphere.

Before finishing these brief remarks, I wish to congratulate sincerely and very cordially Mr. Allen and all his co-workers on the magnificent organization of this convention, the efforts of which will surely contribute to facilitation of our elevated and noble mission, namely, that of transforming those lacking physical vision into living cells of the social organism.

I am certain that equally for Mr. Allen,

his co-workers, and all the superintendents and teachers devoted to the work, the realization of such a high objective would be the greatest moral recompense to which their long and constant efforts in behalf of the sightless, makes them legitimate heirs.

*MARIO FLORENTIN,
Superintendent of the Venezuelan Institute for the Blind.

GREETINGS FROM MONTERREY

MARIA DE LA LUZ GARZA

Miss Elvisa Gamez, teacher of Braille, Miss Maria de la Luz Garza, teacher of English Language, Mr. Alejandro Martinez Paez, teacher of musical instruments, and I, who are here as delegates from the School for the Blind "Jose Ma.-Cardenas,' in Monterrey, wish to express our gratitude to the President and members of the Interamerican Convention for the Blind, for the great honor bestowed upon our Institution by including it in their invitations to this convention which is called together to leave a lasting impression of good will among all the blind in the different states.

Miss Maria de Leon, principal of the School for the Blind which we represent and who, on account of unavoidable circumstances, was unable to attend this Convention, sends you her greetings and those of the Blind of Nuevo Leon to all the blind present at this Convention.

Miss de Leon and all the teachers in our school are sure that after the meeting of this important Convention, the blind everywhere will feel closer together and more united and better fitted for the realization of their highest ideals.

The Blind of Nuevo Leon are with you on this great day when minds and hearts, eager to excel, unite in one desire for comprehension, learning, fraternity and love.

Austin, Texas, 22 June, 1948.

MARIA DE LA LUZ GARZA

SOME NECESSARY STEPS IN ORGANIZING AN INSTITUTE IN A RESIDENTIAL SCHOOL FOR THE BLIND FOR MOTHERS AND BLIND BABIES

JOSEF G. CAUFFMAN
Overbrook

Since 1934 as the head of a residential school for the blind, I have been greatly concerned about the pre-school training of blind children. The overwhelming majority of these children, if educable, will attend a residential school for the blind. Such being the case and because of its great resources, it appears to me that the residential school should be the service center to advise and guide parents and workers concerning the development educationally and socially of these little ones. At this point I recognize a contrary opinion—that the problem is one for social workers. I object to the theory that educators should be excluded from the program merely because the child is preschool, nor do I believe that the social

worker should be excluded entirely. Both have much to contribute; but the program in my estimation should be controlled by educators. There are those Spartan thinkers in the field of social work who would toss these little ones into situations where they must sink or swim, because in their thinking they have adopted as fact the premise that whatever is "normal" is best. They would not temper the wind to the shorn lamb. In their zeal to achieve immediately in the pre-school years the desired goal of normality, they would risk a psychological injury which, not only might, but often does accompany such Spartan treatment.

Our thinking should begin with the recognition that, of course, the pre-school child is first of all a human being, that he is a blind human being, and that whatever we do for him must be done with that qualification constantly in mind. Because schools for the blind have had years of experience with kindergarten training and have watched the army of little people going through that department, malnourished, smothered with mother love, and peculiar in the sense of having acquired numerous blindisms, they are best qualified by experience to deal with these deeply seated and undesirable traits. They are better able to consult with parents in the program which will prevent the growth of such traits. The problems involved are essentially educational in nature. The concerned superintendent will want to do something about the pre-school training of these blind babies.

A summer session for mothers and blind babies which was originated at the Michigan School for the Blind more than a decade ago, and which has been widely copied, seems to be one solution. It permits the child to remain in the home during those pre-school years. It gives advice and supervision to the parent. It establishes a close and friendly bond between the home and school, and a cooperative and helpful relationship between the various parents themselves, and it utilizes the help of all agencies which have any contribution to make; i.e., Lions Clubs, health departments or centers, public schools, associations, and school commissioners, and pre-school workers in the field of education, census takers, social workers in the department of public assistance, etc., etc.

It has been suggested by Mr. Thompson that an outline of the procedure for organizing such an institute be given for your guidance. In compliance with this request I offer the following:

One must know his problem, and the first step therefore, is to survey the need on a state-wide basis. Lining up with the state agencies for assistance is one of the best procedures, for the state agency will have representatives throughout the entire area to be served, and a request from the head of such a department will bring prompt information where it is possible. The state department of education and the State Department of Health, and state councils for the blind would be of great help in providing information. Where schools employ a visiting teacher. the problem of survey is greatly simplified. Some schools are located in states where a council of social agencies can offer assistance. By utilizing any or all of these resources, having located the children, and having decided the size of the problem, the next step would probably be that of state-wide publicity. The league or home dailies and the county weeklies usually are very glad to accept any prepared release given them. Radio may also be employed to give some of its public service time, particularly those stations located at state colleges or universities which have farm hour programs can be very useful as they would be most likely to reach the rural parent. I believe that all agencies which can be utilized for pub-

licity purposes should be approached. Rest assured that too much publicty is impossible, even though no babies are reported through the instrumentality of any of these agencies, the education of the public and the interest aroused will be maintained for some time.

Having established a need for an institute, a tentative daily program should be prepared. At this point, before the parents are approached, it must be decided how long the institute will last, and what services can be rendered as well as what expenses will be involved both for the school and the parent. Some schools have two consecutive institutes of two weeks each. Others have considered a week sufficient while a few have limited their institutes to a matter of days. There is no general rule which can be set. The country varies from locality to locality and each school will have to make its own decision. I personally feel that two or three days is not sufficient to do more than a very little bit of preliminary work, and a two weeks period is almost essential if the parents are not expected to attend such an institute more than once.

During the session, the children will need to have the services of both a competent medical doctor and an ophthalmologist, whose time, of course, must be scheduled carefully, and each parent should have an opportunity for a private conference with both physicians. In addition, the children will need the supervision of a nurse as in some cases problems of formulas, eating habits, etc., will have to be handled by her. The parents will want to become familiar with all of the state and local organizations which deal with blindness and that may be of some assistance either at the time or later. This can best be done by talks given, by representatives of the agencies involved, motion pictures, and or literature. Problems of recreation and play will have to be studied as will social problems such as walking, talking, self-feeding, toilet habits, temper tantrums, playmates, and blindisms. These discussions will fit into a regular program throughout the day. Parents will be organized into round table groups; they will be encouraged to read and report back to the group. In this way much information may be acquired in a short time.

Having set up the tentative program, the next step is to enroll the child and mother so as to secure a maximum attendance. Where the school has a visiting teacher, the problem is somewhat simplified as she may plan her visits to the homes of the pre-school children previously located, and by personal conference with the mother, sell her the idea of enrollment. She can also screen out those children who are feeble minded or too delicate to undertake the training. Lacking the service of a visiting teacher, the facilities available and offered by the department of public assistance, workers from the state associations, and state council representatives, may be enlisted to do the job. In the latter case it will be necessary to supply the workers with a definite plan and blanks. While it involves much clerical work it provides a definite procedure to be laid out for the voluntary or cooperative worker and is necessary if the results are to be satisfactory.

The winter institute will have some advantage as farm women can more readily leave home at that season of the year, but in some states weather conditions would make it unwise to bring babies from a distance to domicile them under new circumstances so far from home. A possible solution is to hold an early summer institute for all who can attend, supplementing it with a late fall institute for the rest. Problems of bringing the children in while school is in session create the possibility of introducing them into

an epidemic or of their carrying an epidemic into the school. It also places an additional burden upon the staff members.

I believe that the longer institute in the early summer permits the school to offer some recreation for mothers who seldom leave their homes and to whom such an experience is a novel one. They will find the movies, a picnic in the park, and a tour of the city of much interest.

It may be that if the school has a good home economics course and unit in child care, this department could be kept over to assist the mothers and to baby sit on movie night.

Probably some special equipment will be needed such as a few high chairs and cribs, baby plates with high sides and divided, unbreakable mugs, plenty of bibs, and a diaper service. Refrigeration plans will need to be organized carefully that formulas may be kept properly.

Lions Clubs may enter the picture at the point where mothers desire to come but cannot provide transportation. If there are no Lions Clubs nearby, other service clubs would render such assistance. Women's aid societies have given this help when asked to do so.

With the permission of the Executive Committee I include samples of forms and programs which have been used in some of the schools and which may be helpful if you desire to organize such a program.

MISSOURI SCHOOL FOR THE BLIND

EXHIBIT "A"

TO ALL PARENTS OF VISUALLY HANDICAPPED CHILDREN, SIX YEARS OF AGE OR YOUNGER:

Though we are called the Missouri School for the Blind, nearly half of our pupils have some sight. They do not have enough sight to keep up with classes in the regular public schools, however. I mention this to let you know that we are interested in **all** children who have serious eye conditions.

Because of the large number of parents who write us and visit us asking for advice about their problems with the eyes of their children, we are trying something new this year and are sure you will be interested.

We are having a three-day conference here at the school. Mothers of children with poor sight and six years of age or younger are invited to come to the school Sunday afternoon or evening, April 18, in order to be here at the start of the conference on Monday morning, April 19. We want them to bring their children with defective vision and stay at the school as our guests, free of all charges, through Wednesday, April 21.

During the three days, Monday, Tuesday, and Wednesday, the following help will be available to mothers:

1. Their children can get excellent free medical and eye examinations.
2. If sight can be restored or improved, they will be told how they can get the help they might need.
3. If their children's eyes cannot be helped, they can:
    a. Inspect our school
    b. See our pupils at work
    c. Learn about large type books and Braille
    d. Hear how to help their children develop as normally as possible
    e. Learn the type of toys blind children should have
    f. Mothers can learn what they can expect their children to

be able to do at various ages

g. Learn of the services available to the visually handicapped

h. Observe their children at play with others to see how they compare with the others

i. Compare notes with other mothers who have similar problems

j. Realize that their children can become useful, happy, and independent citizens

4. There will be a nursery and play room where the children can be cared for and the mothers can be free part of the time.

5. There will be a free sight-seeing tour of St. Louis one afternoon for the mothers. Another afternoon there will be a visit to the zoo.

The only expense to mother and child will be transportation to St. Louis and back home. If this money is not available, and the mother will write us, we believe we can see that she has a round trip ticket. Those who live near enough to St. Louis might prefer to go home each night.

Our school, if you need it, can give your child a complete education from the kindergarten through the high school. It is the only public school in the State of Missouri for the blind child. It is not a charitable institution but is a part of the state's regular public school system. Remember, **a child does not have to be totally blind to be unable to read ink-print books.**

There are no charges for room, board, or tuition. It is best for children to start at the age of six so they can keep up with other children their age.

Please help us to help you if our help is needed by filling in the answers to the questions on the attached page and returning it to us in the stamped, addressed envelop at once.

Sincerely and appreciatively,
ROBERT H. THOMPSON
Superintendent

EXHIBIT "B"

MISSOURI SCHOOL FOR THE BLIND

Please draw a circle about the correct answer or write in the desired information. You do not obligate yourself in any way. We merely want to know how many parents to expect.

1. We have a child with very poor sight. YES NO
2. We have a totally blind child. YES NO
3. Name of child ..... Age.....
4. Corect name of parents .....
5. Correct address .....
   .....
6. Mother and child will attend conference. YES NO
7. We will plan to stay at the school. YES NO
8. Name of doctor who has been treating the eyes of our child. .....
   Doctor's address is .....
   .....
9. We will need help to buy our tickets to and from St. Louis. YES NO
10. Father would like to attend, too. YES NO

REMARKS: .....

EXHIBIT "C"

SPRING CONFERENCE FOR MOTHERS OF BLIND BABIES

April 19, 20, 21, 1948
Missouri School for the Blind

County and District Offices
Division of Health, Missouri
Attention: Officer in charge

Dear Sir:

Your offices throughout the State of Missouri have made many referrals of

blind and near-blind boys and girls to our school. We have appreciated this very much. We need your help again.

It is our experience that parents of blind babies are so at a loss to know how to train and care for their new problem that child and parent both suffer. The parent is frustrated and the uneasy family situation has undesirable emotional effects on the child.

Our effort to meet this situation and offer some help is to have a conference of mothers of pre-school blind children up to and including six years of age. The attached literature is self-explanatory. If you have any knowledge of such cases in your area, won't you please advise them of this source of assistance and urge the importance of their attendance. Also, please give us complete information.

There are no charges for anything at the conference. In hardship cases, a local service club would be happy to buy a round trip ticket for such a mother.

Yours appreciatively,

ROBERT H. THOMPSON
Superintendent

RHTems

EXHIBIT "D"

PERKINS INSTITUTION

Information We Would Like to Have From the Parents

1—Does your child sleep in a cot, bed, or crib?
2—Does your child use a high chair? Will one be necessary?
3—Is your child toilet trained? Days? Nights?
4—Can your child ask when he wishes to go to the bathroom?
5—Does your child use the regular toilet, toidey seat, or potty chair? If either of the latter, would it be possible for you to bring your own?
6—Is your child accustomed to a morning nap? An afternoon nap?
7—Does your child feed himself?
8—Does your child drink from a cup? Does he hold it alone?
9—Is your child accustomed to playing with other children?
10—Is your child timid with strangers?
11—Has your child any particular fears?
12—If you have not already done so, will you tell us whether or not your child is allergic to any specific foods?
13—Does your child eat well?
14—Does your child dislike any or many foods?
15—By what name do you call your child?

Information for Mothers Attending the Pre-School Project

1—**Registration** will take place at the Nurse's Office at Perkins Institution on Sunday afternoon, June 17, between 3 P.M. and 4 P.M. Each mother should bring with her a letter from her own doctor dated within forty-eight hours of the childs arrival at Perkins, certifying that the child is free from infection and has not been exposed to any contagious diseases. As you know, we are doing this to avoid any possibility of children arriving who are not in proper physical condition or who might pass on a contagion to the other children.

2—**Program**: A schedule of the lectures planned has not yet been completed. As soon as it is completed, we will send you the complete schedule of both lectures and discussion groups. In the meantime, we are planning to have one lecture by one of the outstanding authorities in various fields of child development at 10:30 in the morning and one at 2 o'clock in the afternoon. There will be ample opportunity for individual conferences with authorities on pre-school education for blind children and on nutrition, and with social workers, if desired.

3—**Clothing**: Will you kindly mark with the child's initial of the first name and

the complete last name all clothing which is to be sent to the Perkins laundry; for example, E. JONES. Please keep in mind to have your child comfortably dressed, preferably in clothes which he has worn at home. Sunsuits and coveralls will probably be the most satisfactory. We would suggest that you bring with you only clothing which is suitable to send to an institution laundry, if you wish the laundry done here.

4—**Living Arrangements**: Each mother with her child will occupy a separate room. The rooms will be simply furnished with a bed, bureau, boudoir chair, and straight chair. If you would like your own radio, bring one which will operate on direct current (DC) only. Perkins will furnish the bedding, towels, etc.

5—**Suggestions of Things to Bring With You**

Ration Book No. 4
1 soft blanket
1 pillow, if your child uses one
Your child's favorite toys
Medicine needed for the 2 week's period

If you wish to bring his favorite spoon or mug, we shall be glad to have you do so, but we will ask you to be responsible for them at meal time.

6—**Responsibility of Mothers** will include getting your child up and dressed for breakfast, feeding him or being present at meals, attending to after-breakfast toilet care, bathing the child, and putting the child to bed for the afternoon nap. There will be teachers and attendants on duty so that you can plan for free time both in the afternoon and evening.

7—**Recreation Available**: There will be opportunity to use a tennis court on the school grounds. There is a large indoor swimming pool which will be available and there will be a reference library with many current periodicals. We also hope to arrange a few evening activities which will be of interest.

8—For directions on how to reach Perkins Institution, see the enclosed map.

We shall be happy to welcome guests, but we regret that because of the wartime limitations it will be impossible to ask them to remain for meals.

Summer School Project

Child's name: Date:
Father: Mother:
Address: Address:
Telephone:
Name of Pediatrician:
Address:
Letter received from local medical doctor?
(Check) Yes..... No.....
Hospital report received?
(Check) Yes..... No.....
Registration Fee Paid: Amount.....
Ration Books Received?
(Check) Yes..... No.....
Weight of baby:
Weight of baby: Date Date
Weight Weight
General condition:
Comments:
Examined by: .....

Nursery School Program

For Children Aged 2 and Over

7:00 A.M.—Breakfast for children.

8:00 A.M.—Breakfast for mothers.

9:00 A.M.-9:45 A.M.—Supervised play periods—story, clay, pegs, beads, etc.

9:45 A.M.-10:00 A.M. — Toilet — mid-morning lunch.

10:00 A.M.-10:30 A.M.—Half of group—free play, outdoors if possible. Half of group—mid-morning rest and music.

10:30 A.M.-11:00 A.M.—Same as above, reversing groups.

11:00 A.M.-11:45 A.M.—Quiet indoor free play—prepare for dinner.

11:45 A.M.-12:15 P.M.—Dinner for children.

12:15 P.M.-2:00 P.M.—Naps.

12:45 P.M.—Dinner for Mothers and Staff.

2:00 P.M.-2:30 P.M.—Dress—cup of milk.

2:30 P.M.-4:00 P.M.—Free play, outdoors if possible.

5:00 P.M.—Supper for children.

6:00 P.M.—Supper for Mothers and Staff.

This program applies on the following days from 8 A.M. to 6 P.M.:

Monday, June 18 through Saturday, June 23.

Monday, June 25 to Noon of Saturday, June 30.

Suggested Toys and Equipment

Dolls and clothes
Stuffed toys
Doll carriages
Housekeeping equipment: brooms, dishes, stoves, pans, furniture, etc.
Jig saw puzzles (few large pieces)
Books (esp. with raised material)
Push toys
Sound toys
Coloring books
Plastic pegs and board
Tower toys
Matching pairs—any equipment
Blocks
Clay
Finger paints
Beads (large holes)
Musical Equipment (drums, triangle, horns, etc.)
Holgate Educational Toys
Nestle blocks
Telephone
Out-of-door equipment—rocking boats, carts, wagons, rocking horse, swings, slides, jungle gym
Play pens

EXHIBIT "E"

MICHIGAN SCHOOL FOR THE BLIND

Opportunities
in
Special Education

PRE-SCHOOL TRAINING FOR MOTHERS

The Michigan School for the Blind was the first school to provide training for the mother of a physically handicapped child.

PERIOD OF TRAINING

Four consecutive weeks during the summer months.

ELIGIBILITY

Applicant must be the mother of a pre-school visually handicapped child and must be a resident of Michigan.

The mother and child must come together because the program is arranged for both.

ENROLLMENT

To enroll, write to Mr. Wallace J. Finch, Superintendent; or to Mr. Eldon Wolfe, Visiting Teacher.

EXPENSE

Transportation is the only expense to the parent. Board, room, and laundry are furnished to mother and child.

STAFF

Superintendent
Visiting Teacher
Teacher
Social Worker
Physician
Oculist
Nurse
House Mother

OBJECTIVES

For the mother

1. To teach the mothers the importance of the methods to be followed in early training. These methods will give their children a foundation of habits and attitudes that will prepare them to be independent and to meet life's situations as normally as possible.
2. To establish a relationship of co-

operation between the home and the school.

For the child

1. To become acquainted with his teacher and adjusted to the school and the dormitory environment and at the same time to have a feeling of security with the presence of the mother; thus making it much easier for the child to enter school when he becomes of kindergarten age.
2. To adjust to a regular daily schedule in living habits. (Feeding and eating habits present many problems).
3. To adjust socially by learning to play with other children, etc.

Program—Four Week Period

First Week

Adjustments to new situations
Children—Physical examinations
Mothers—Individual interviews
Observation
Observing mothers in child care, thus learning each individual need.
Discussion and study groups are organized.

Second and Third Weeks

Group conferences with the teacher, social worker, or nurse in the morning and afternoon.

Fourth Week

Children's Literature
Types of stories suitable for young children.
Summary of the benefits received during the Nursery School. Suggestions for improvement of the program.
Children in Nursery School for four week period.
Observation in individual and group play
Stimulating play interest
Behavior problems studied.

Tentative Daily Schedule (Children)

7:00—Breakfast.

8:30-11:00—Teachers observe the children at play. Use of play material in the nursery and use of the outdoor equipment. This observation to be constructive in helping the child who needs guidance in behavior and initiative, and to help the blind baby from passivity to activity.

11:30-12:00—Dinner.

12:00-3:00—Rest.

3:00-4:00—Play-time.

4:30-5:00—Mothers and Children prepare for supper.

5:00—Supper.

(Mothers)

7:00—Breakfast.

9:00-11:00—Class.

11:30-12:00—Dinner.

1:30-3:00—Class.

300-4:00—Mothers observe the children at play.

4:00-4:30—Braille (Grade One).

4:30—5:00—Prepare for supper.

5:00—Supper.

Social Activities

After the children are put to bed, the mothers enjoy the evening together.

The school also plans social activities for the mothers—moving pictures of the school — sight seeing bus trips — if any birthdays, they are observed—picnics on our own campus, etc.

Books and magazines are provided at all times.

WHAT IS A DESIRABLE AND COMPREHENSIVE PLAN FOR AID TO THE PRE-SCHOOL BLIND CHILD AND HIS PARENTS

By
FRANCES E. MARSHALL
Perkins

At the last convention of the American Association of Instructors for the Blind, one of the country's leading educators was heard to comment, "The training of pre-school blind children belongs to the field of education and is not within the province of the social worker." With this statement I heartily agree; but, from observation as a social worker in a school for the blind, I am convinced that the parents of pre-school blind children, and the children themselves, are in desperate need of help and training, and that the problem is too big for any one agency to handle in an adequate manner. It, also, seems silly to quibble as to whose responsibility it is, or to whom the glory should go whenever anything satisfactory is accomplished. Rather it is a problem which in most geographical areas must be handled in a cooperative way, using all existing facilities and agencies and forming new ones when necessary. In this way unique skills, special knowledge, and wide interests may all be combined toward meeting this problem.

While it is true that some recognition of the pre-school blind child has been made on a national level chiefly through the National Conference held in New York City in March of 1947, he still has special needs as do his parents. By using the term parents, I intentionally include the father as well as the mother, and would that I could include all the doting, unrealistic, over-sympathetic, and misguided grandparents and other relatives. The problem is acute in many areas and is growing worse because many states are reporting great increases in the number of young blind children coming to their attention. The report of the New York Conference has been edited by Dr. Berthold Lowenfeld and I hope it can still be obtained from the American Foundation for the Blind in New York. It gives an excellent, overall picture of the problem we are considering and I recommend it to you if you have not already seen it.

A desirable and comprehensive plan for aid to pre-school blind children and their parents is primarily, therefore, a cooperative one involving both state and private agencies, and I have been asked to outline briefly the points which I feel are essential.

First, there should be a state law making it compulsory for ophthalmologists and doctors to report all babies and pre-school children who are, or who are, suspected of being blind. The natural place for this reporting is to central registers of the blind, which should be within the framework of the State Bureau of Services for the Blind. Since many ophthalmologists believe that they are "protecting" their private patients by not reporting them to the "state," either case work needs to be done within the medical profession, or there should be closer cooperation between the state and private agencies to overcome this prejudice.

The term "private agencies" is used because in many states doctors and opthalmologists are on the staffs of both private and municipal hospitals where many of these children have either been born or are brought for eye diagnosis and treat-

ment. It is frequently at this point that the first real fears, anxities, frustrations, and feelings of guilt on the part of parents are expressed. This brings us to the second point; namely,—

The need of skilled and understanding medical social workers for case work with the parents. What precisely is meant by "case work"? Simply this:—case work is a professional service offered to a person in trouble to help him meet a need or work out a problem. This may be done in any one of several ways; for instance, (1) by obtaining financial relief, (2) manipulation of the environment, (3) adjusting a situation where there is a conflict of personalities, or (4) through supportive treatment and reassurance and often simple psychotherapy in working out emoional problems.

Thus when a social diagnosis has been made and the appropriate services given, the medical social worker should at this point have available a Bureau of Services for the Blind to which she could refer this individual for so called "case work" or for further specific help which is not within her scope.

The State Bureau of Services for the Blind should be the third resource. The word "services" should be taken literally, and it should be the keystone of the program for the blind. From it there should be available to each person seeking help, workers whose training and experience can not only assist in discovering the fundamental need of the individual concerned, but having determined the need, either do something about it or find someone or some agency which can. It matters little whether it is financial assistance, a foster home, a job in a sheltered shop, admission to a specialized school, or simply encouragement and reassurance. It may be that what is needed most is social case work to help the parents accept their handicapped child. Or again it may be that the child needs a nursery school teacher who can give concrete and specific advice to his mother.

Therefore, a fourth resource is that there should be a trained nursery school teacher in the state setup whose function it would be to visit the homes of the children, observing the youngster in his home, and the mother's attempts to train him, and then giving specific instructions as they are needed. These areas may be, for instance, helping to select specific toys, special instruction regarding eating problems, the establishment of correct toilet habits, or just plain suggestions as to how to handle well-meaning relatives. While the services of a nursery school teacher should be available, they should under no circumstances be forced upon a mother who is not ready psychologically and emotionally for this type of direct help. We believe that for this work a person well trained in nursery school methods is better qualified than a person experienced only in work for the blind.

There is need, too, for group work with parents of pre-school blind children, through a summer school program within the framework of a school for the blind. Because of my special interest I would stress the need for this fifth resource. It is mutually helpful for mothers and fathers of pre-school blind children to meet together in their own community or state and receive the assistance which comes from group participation. It is gratifying to observe the increasing number of states where this service is now being offered.

The objectives of our summer school, which was given partly on a demonstration basis, were as follows:

1. To give factual information regarding the normal development and growth of young children; also some of the medical and surgical implications of eye conditions.

2. To determine whether direct group

teaching could give specific help to mothers in order to lessen their anxiety.

3. To determine whether there was value in the interchange of ideas and information in a group relationship.

4. To provide for further psychological investigation and to collect data for further study to be carried on in the home with the aim of constructing valid psychological tests for blind pre-school children.

5. To acquaint parents with the many available resources for the blind in regard to education and many other areas.

Those of us on the administrative staff of the summer school planned to give the parents information from the medical, psychological, and psychiatric points of view. We tried to create an opportunity for the mothers to ask questions in a sympathetic, understanding, and non-critical atmosphere. Furthermore, we wanted an opportunity for emotional release through group identification and the supportive guidance of the leaders. All of this gave the opportunity for congenial friendships to develop among individuals having similar interests and problems. The leaders of such a group have many roles they must assume and they should keep the atmosphere an informal and happy one.

It has been demonstrated through group participation that a more positive, happy, and warm relationship between mothers and their babies develops and grows in a relatively short time, and that in a group troubled people can accept help who otherwise would hesitate to do so on an individual basis.

It is hoped that eventually a separate building or department can be maintained in schools for the blind where mothers and their blind children may come for study and instruction. This service should be available during the school year so that through this study procedure of the blind child we can have a truer evaluation of his emotional, psychological, or physical assets and liabilities. Such a plan must have the cooperative support of not one, but many specialists—pediatricians, ophthalmologists, psychologists, psychiatrists, nursery school teachers, educators, social workers, and nurses, to name a few.

I strongly believe that another service which a school for the blind can give, either as a supplement to a summer school program or as a substitute for it, is a short, organized seminar, or so called "traveling clinic." Because many mothers, workers, and teachers find it difficult to be away from home or the office, only one day meetings may be possible. One day sessions, however, can be organized to meet the specific needs of the persons attending, for instance, one day might be for workers for the blind, another day for parents of pre-school blind children, and another for students, etc. Such a program naturally should be focused on the needs of the groups. It should be educational in its nature and should not in any way be given as a recreational outlet. For instance, there should be talks or lectures under such headings as the physical, emotional, and mental health of handicapped children and their families in which pediatricians, ophthalmologists, and psychiatrists could participate. In the planning, workers in the community could cooperate on the basis of their own personal experience, and they could assist in the financing and the publicity of such a project. A worker from the State Department for the Blind or an educator should give the necessary leadership.

What provision should there be within the state for wise and intelligent guidance and counselling of parents for an educational program for little blind children? There is much discussion at the present time on the use of sighted nursery schools, public and private kindergartens, and even sighted schools for primary and secondary

training. Whatever the philosophy of the individual state or the community may be, it has seemed, in general, desirable for a child to have experience in a sighted nursery school whenever it is possible and practical. The contact with sighted children is unquestionably beneficial and it is helpful for parents to have a child start his separation from the home in a normal and natural way, such as being taken to a nursery school for a few hours a day just as his sighted brothers and sisters have been. Whether a young child should be sent to a public school, a sight-saving class, a public school where Braille classes exist, or to a residential school for the blind, is a decision which parents may need help in making. Whatever the final decision, both the child and family need help in accepting the plan and making a satisfactory adjustment to it. In some instances much interpretation must be done in a school setup and an understanding person in the department for the blind is needed to do this.

Another resource that should be available in a community is the provision for placement of a young blind child outside of its own home. Mentioning this need does not in any way imply that I am ordinarily in favor of this procedure, but I do recognize that there may occur a reality situation in a family making such a plan not only desirable but necessary. For instance, I am thinking of a baby whose mother suddenly must leave home to go to a hospital, sanitorium, or some other institution; or, of the family which is broken through death or divorce and when a temporary placement in an institution seems indicated because of no available relatives; or again, when a child has to be taken over by the Child Welfare Department because of the inability of the family to give him proper care. There should be two possibilities for placing a blind child outside of his home. (1) A so called "Blind Babies Nursery," ideally keeping the child for a short time, unless the home is permanently broken and (2) (foster home care) by a service which can be developed through the use of private agencies, if not by the State Department of Child Welfare. There should be an awareness of all individuals working with people of the need for this service and a willingness to cooperate. It occasionally happens that some of these pre-school children appear retarded and thus potential foster parents must be encouraged to accept handicapped children and to use every effort to develop the talents and abilities latent in the child.

Regardless of where the child is placed and brought up there are fundamental needs that must not be overlooked. Chief among them are the need for love, affection and security. These needs on the part of any child are so basic that they must be stressed again and again, for who has not seen a youngster who shows all too plainly his need for individual attention and love through his persistent "clinging," not only to members of the staff, but even to strangers.

Who should take the initiative in your state to organize and develop these services into a cooperative, cohesive entity? Where is the money to come from and who is to supply the leadership? If you are concerned with these problems, if you are earnestly seeking a solution, a way can be found. A trust fund may be approached or federal funds may be available. There may be laymen in the community interested in these problems who could help you, or a service club such as Lions, Kiwanis, might be interested. It is possible that the American Foundation for the Blind in New York could lend leadership. It is recognized that the facilities of different states and communities vary greatly—but goals must be set up, and machinery set in motion to achieve these goals.

WHY SHOULD WE BE CONCERNED ABOUT THE PRE-SCHOOL BLIND CHILD?

By
HARRIET E. TOTMAN
Cleveland Braillle Classes

The Catholic Church is reputed to have said, "Give me the child till he is seven years old and then you may do with him as you will." The more I work with blind children and their parents during the pre-school years, the more I am convinced that this saying is true. It is therefore disturbing to see that, by and large, educators of the blind have been neglecting the five most precious years of these children's lives—the years when they learn or lose the most, the years when the basic physical habits and skills are laid down, and the years that have the most profound influence on the character and personality of the child. During these years parents are left, in many instances unaided and in others with too little help, to struggle with a task for the handling of which even the trained educators of the blind have little agreement as to philosophy and body of techniques.

Even those who deal with normally seeing children are becoming concerned about the pre-school years. In a recent bulletin of the National Association of School Social Workers appears this paragraph:

> "Children, who enter our public schools today, have lived through six years of very complex and extremely significant experiences. Some have had good physical care, opportunity for varied experiences, associations with other children, materials for constructive learning, together with the love and understanding that make it possible for a child to meet his new responsibilities in school. Many others have had limited experiences because of limitations in capacity, lack of care, little opportunity to work with toys and materials, restricted play with other of their own age group or disturbed and unhappy family conditions."

The author then goes on to describe a program for interviews in the home, group meetings of teachers and parents, and individual conferences, in order that the school may understand the home background of the children, and that parents and teachers may work together to give the child a better begining in school. Cleveland is this year putting on three workers to make similar study of the backgrounds of its kindergarten children. Although this will be helpful for those handling the kindergarten and first grade child it seems to be like locking the door after the horse is stolen. If the behavior of these children indicates that study must be made of what has gone before, how much wiser to have had parental education and guidance to insure that what is done in these years should be wholesome.

If such steps are considered necessary for normally seeing children, what then about the blind? What is being done in this respect among our potential first graders? There is great variation throughout the country. We, whose interests have long lain in this field, who have touched on the fringes of the possibilities, are delighted to see the awakening interest throughout the schools and agencies for the blind. Educators for the blind have long been aware that parents needed help but we have moved slowly in this area. Mr. Edward E. Allen gave a message to mothers of blind children at a Congress

of Mothers in 1898. We might even point up that in the early 1800's, Dr. Samuel Gridley Howe, always an advanced thinker, gave as good advice for the mothers of pre-school blind children as has ever been given. Mr. O. H. Burritt addressed the Congress of Mothers in 1907, but it was not until 1937 when definite assistance to parents was begun. At that time Michigan opened what I believe was the first school for mothers and blind babies. During the past four or five years, action has come rapidly. Witness the summer institutes at Perkins, Illinois, Iowa, Missouri, and I understand Wisconsin is conducting its first one this summer. Undoubtedly many others are having such institutes. Some times more is being done than meets the eye. I talked recently with a superintendent whose school has no preschool work, he said, but during our conversation I learned that when he knew of a blind child, he and his wife called and when ever they were in the vicinity of the home they dropped in. He modestly said "All I can give them is a little consolation" which I pointed out was one of the most vital factors in the training of these children for until the tension of the parents is relaxed, training of the child cannot be wholesomely carried on. In many states visits to the school of from a day to a week with less elaborate plans than in the states reported are being quietly carried on. Probably few of you know that for several years the Ohio School has had visitation of parents with prospective pupils from as young an age as six months with study of the child and counsel with the parents included.

These institutes are good and they or some form of parental instruction should be extended throughout all the schools. They do not however go far enough. After the Preschool Conference in New York I believe everyone felt that there were many ways of approaching this problem and that there was need for several services complementing each other and determined by the conditions in the respective communities.

In Cleveland we have had home visitation for our preschool blind furnished by the Braille Class Department since 1916. It is an intimate association with this service for more than twenty years which has shown me the great need there is for more and closer counseling. In this experience I have met all types of parents: those, fortunately few in numbers, whose sole interest is to be rid of the child: those, who earnestly desire to give their child the best in life. Of these latter some have sought and explored every source of information. But where can they turn? Some are exceedingly resourceful whereas others, ignorant of what harm they were doing by their coddling and pampering, were making their children wholly unable to ever find the ultimate happiness in life which the parents mistakenly were trying to give them through indulgence. What a joy to help them to see that this happiness could come if the child were trained so he could be independent and able to serve instead of only to be served, that he can be acceptable among the seeing and take his part in the family circle.

I have seen these children, when the parents have been helped, grow and broaden in their interests and develop the skills and habits which their capacity permitted. For example one child fed himself his lunch unaided the day after his mother had been convinced that he was able and should do so. Some mothers had to be shown that their child's failure to talk was due to their having no need for speech. All their needs were anticipated. Hunger was not felt before food, like manna from heaven, was spooned into the mouth, and no attempt had been

made to associate words with acts, objects, etc., to show what language was.

I have seen children fail to make the venture from their own little world of unreality and others who achieved it only by the greatest of struggle on the parents' part bolstered by the visitor and by the counsel of the psychologist. We have two such children now—one 5 years old and one 5½—neither of whom has made satisfactory inter-relationship with other children and very little with adult members of the family. Their social development would place them on a nursery school level rather than at kindergarten as they should be. Both have excellent muscular coordination and orientaion; they can play with toys and would be quite satisfied if allowed to wander about, to sit and chatter to themselves, to listen to the radio and to repeatedly do the simple processes they have acquired with toys. One meets attempts to introduce anything constructive by a quiet and somewhat shrewd refusal, and the other with temper tantrums. Their mental development remained almost on a plateau over a considerable period. Very specialized attention to these children and assistance to their parents has been necessary and, were it not available and accepted, the future for these boys would be that of permanent retardation. Unless they can be weaned from their egotistical little sphere of personal gratification and so stimulated as to develop a willingness and desire to please others they can never be drawn into a learning situation.

Our chairman asked that some results of improper handling, as these are manifested in later school and society, be illustrated. As there are so many factors which enter in to the development of a child one hesitates to ascribe these definitely to mishandling in the preschool years. It is my belief, however, as you may have gathered from my remarks at the outset that most of a child's characteristics, physical and emotional, are determined before he even reaches the school. The little mannerisms, his patterns for meeting his problems, for achieving his satisfactions, for getting along or not getting along with other people, are pretty well fixed in these years. To be sure some modifications of these are possible, but those who deal with the child and the experiences he encounters in his formative years, leave their mark. Although this is evident in many areas I shall limit my illustrations to four:

(1) that, of what Mr. Chas. Buell in his "Sports for the Blind" has designated as "certain physical manifestation of nervousness which isms."
have become known as 'blind-

(2) of physical independence

(3) of patterns of reaction, based on indulgence and over protection

(4) of attitudes toward the child's own handicap

One of the brightest children in our Braille classes in Cleveland, who has made excellent academic progress, is versatile in his social relationships and enjoys many interests, is a true example of many blindisms such as swaying backward and forward when talking to anyone intently, throwing up his head, facial contortions and nervous excitable jumping. This child, born blind, came to the attention of the Braille class department at the age of 3½. Although he was one of the sturdiest small blind children I have ever known, had love and affection of his parents and sister, and every consideration had been given to him, his activities had been very limited, his achievements had been much

over-rated and he had been much stimulated and shown off. It has been impossible in the years of work that have followed to overcome these mannerisms. Had his great exuberance and full vitality been given outlet in his very early years in vigorous activities rather than in parlor entertainment and play mostly in the limited areas of his second floor home, a great deal of this nervous behavior could probably have been avoided. The boy is now interested, himself, in overcoming these awkward movements. In some forms of activities such as eurhythmics and in music, which he dearly loves, they appear at a minimum. However, the habit had become so deeply intrenched that it can probably never be entirely eradicated and our only hope is that his wholesome personality and genuine sincerity and enthusiasm will win the interest of his **seeing** asociates and overshadow his unfortunate mannerisms.

Far more serious than the physical mannerisms are the failures to develop physical independence; in walking and care of person at the age when the child becomes capable of it. In later school life we find such children more timid in getting about, more lacking in grace and ease of movement and in self assurance. Moreover, the mental development is also retarded as experiences and association with others is limited when the child can explore in so small an area and compete with and enjoy, or be enjoyed by, companions.

This delayed physical independence is closely related to unfortunate patterns of reacting to situations which are built up in these years and affected also by the same indulgence or over-protection that produces this pattern. It is as natural as it is unwise for parents to be fearful for their blind child, and to try in every way to make up for the child's great handicap. Could they but see the full implications they would realize that the child whose path is made easy, who learns to depend entirely on others, who gets favors not granted to his siblings, who, in short, finds his blindness is a pass for all these things, is going to use this same pattern of **ex**pecting things to come his way through life. I have seen bright capable children whose early years were thus handled so selfish and self-centered that it affected their success in school. They would not work hard (and what blind child can achieve education without it), they took no advice from anyone, being accustomed to make demands themselves and although one boy, I have definitely in mind, was able when he first entered high chool to win the admiration of his seeing schoolmates and his instructors by his ability and quick reactions, he lost this all by his demands for his own selfish desires and whims and his disregard of others.

Likewise over-protection unfits the child in that it creates a pattern of dependence and fearfulness that makes a school child, and later an adult, who will not, and often cannot, strike out for himself.

Perhaps one of the most important reasons for contacting the parents and the preschool child early is to insure good mental health in relation to the child's visual handicap. Here the first work is with the parent and fortunate indeed is the child whose parents have, while he is still very young, counsel that helps them to release their tensions and feelings about the child's handicap. Many there are who have, or have had, feelings of guilt, shame and rejection and who, unless these have been wisely dealt with, can neither face the child's condition phil-

osophically nor can they help to build up in the child an attitude more wholesome than their own. Some parents, whose own mental health is good, come to this problem with a fine understanding, but, even for the wisest, there are unrecognized pitfalls. For all parents there is need at some time to point up the child's way of facing and overcoming his handicap. This, I feel, should be done while the child is young. The psychiatrist, *Dr. Dreikurs, feels that the deciding factor in a child's achieving adjustment to a physical handicap is **courage** and that "at this early age of the child's courage is still intact." We must see that the parents do everything to help the child use this courage while he has it, that they allow the child's self assurance to grow by not removing all obstacles but allowing him to use his remaining capacities on tasks to which he is equal without undue pressure.

The emotional adjustment to his blindness should also be begun in the preschool years. *Dr. George Preston in his "Substance of Mental Health," ascribes the mental health of certain individuals to a sort of immunity comparable to that of the vaccinated person. He asks "Could it be possible that many of us, as children, are exposed to small doses of those factors which produce mental illnesses while we are still being taken care of in safe, protected places?" Putting it negatively can it be that many of our older children are badly adjusted to their blindness because they were never "vaccinated" with the small doses of discomfort, inconvenience, and unhappiness, that their blindness might cause, during the years when in the love and protection of the family they could accept it and become immune to the later "infections" that going into the hard inconsiderate world bring to them.

These then are some of the things that can and should be brought to the parents of the child handicapped by blindness that he may be insured the maximum positive experiences of the first six years. May I again enumerate:

good physical care
opportunity for varied experiences
associations with other children
materials for constructive learning
love and understanding that make it possible for him to meet new responsibilities in school

which together should provide him with a reasonably adequate adjustment to his visual handicap.

*The Challenge of Parenthood—Rudolf Dreikurs—Duell, Sloan & Pearce, N. Y.

*Substance of Mental Health—George Preston—Reinhart & Co.

THE READING PROGRAM IN THE ELEMENTAY GRADES

MRS. RODELLA BINDER, New Mexico

Reading is the most important subject in the primary grades because its mastery is essential to the learning of nearly every other school subject. Therefore the reading program in the primary grades must include those activities which develop the skills, attitudes, and interests necessary for a successful reading foundation.

The constant improvement of reading

instruction should be emphasized. Teachers should keep up with the latest books on reading. This is one of the reasons why the Reading Committee of the New Mexico School for the Blind was organized.

Teachers should recognize that children mature physically, emotionally, socially, and intellectually at different rates. The teacher will study each child so as to identify his deficiencies in these four fields and will then arrange her instruction in such a way that these deficiencies will be overcome before attempting any formal reading.

Most of this conditioning will take place during the reading readiness period. However, readiness is also necessary on the higher level. Each time a child meets with a new and different field of reading, he needs guidance.

For overcoming poor muscular coordination, activities which use the large muscles are helpful. Rhythmic games, building with blocks, and playing with large balls prove effective. Games such as beanbag and ring toss are enjoyed by most children. Later clay modeling, inlay puzzles, and the pegboard are introduced. Tracing around a circle, a square, or animals cut out of heavy cardboard or outlined with a tracing wheel will be helpful. For children with partial vision, cutting, coloring, and pasting provide interesting work which can later be correlated with formal reading.

Leaving home to attend a residential school may be a strange and almost terrifying experience, especially when parents have not conditioned themselves nor the child for this change. The effect upon the child's emotions should not be under emphasized. Here, again, there are great individual differences. Until a child is free from fears, homesickness, and other emotional disturbances, he is not ready to adjust himself to any learning situation.

For the first few weeks the experiences in the classroom should resemble preschool life. The teacher must make each child realize that she is interested in him and that she loves him. This sense of security will put the child at ease emotionally and he will be ready to participate in various activities.

After the child feels secure in his surroundings, he must learn to live in a group. He must learn to listen when others are talking, must learn not to interrupt, and must learn to work and play with the group. Group games, the conversation period, caring for plants or animals, straightening up the room, taking turns, and learning to share all help the child to develop socially.

To meet the intellectual needs of the reading readiness period and to add meaning and interest to his later reading, there must be many appealing and interesting experiences on the level of the child's understanding. Many of these experiences will be about the home, the community, flowers, trees, animals, toys, and trips. Group activities as caring for pets and making booklets are valuable.

Simple stories, poems, and songs are another source of valuable experience. The children should retell all or part of some of the stories. To give the timid child an opportunity to participate, ask him a very simple question about the story or have him join the other children in repeating familiar phrases like those found in the story of "The Three Bears." By relating instances in the story, the children become familiar with the content and with the forms of expression.

Excursions or trips are very necessary for children without sight. They not only furnish them with a new experience but provide another topic for conversation. Talking about these trips reenforces the impressions gained from them.

Dramatization gives the children a chance to use the ideas they have learned. Making use of their ideas develops good habits of thinking. Then, too, dramatization appeals to the play motive. Dramatization is not limited to stories, but may include everyday occurrences and situations. If the timid child does not want to take part in the dramatization, he may act as property manager.

The foregoing activities call for the frequest use of oral expression. To be ready to read with understanding, the child should have in his oral vocabulary the words he is expected to learn in his reading. The New Mexico State Course of Study places the minimum speaking and comprehension vocabulary at 600 words. He should be able to combine these words into sentences of about the same length and difficulty as those he will encounter in the newer Pre-primers and Primers.

To enable children who come from non-English speaking homes to develop this ability in oral language, the teacher should encourage talking on the part of the children. Conversation periods during which the teacher brings about an atmosphere of courteous exchange of ideas will encourage even the shy and timid child to express himself freely. When a child has finished a task he may be given a chance to show his work to others and to talk about it. The other children tell him how nice his work is and immediately there is a feeling of belonging to the group.

Good oral expression calls for habits of accuracy in enunciation and pronunciation. To develop accuracy in enunciation and pronunciation and at the same time provide the necessary auditory training for this period, have the children listen to and learn nursery rhymes especially those which emphasize a particular sound, such as, "Bye Baby Bunting." Have the children listen for words beginning with the same sound. Let them try to suggest other words beginning with that sound. The teacher may suggest the meaning of a suitable word and let them supply it. The teacher should at all times present good models of enunciation and pronunciating. This is the best way to correct and refine the speech habits of children.

Children with speech defects must be given special help to overcome these defects as far as possible. To avoid embarrassment they will often hesitate to take part in oral expression and will not make the necessary progress in language development. The teacher must not direct attention to the child's mistakes before the group. She may repeat an idea for emphasis using a better form of expression.

Since the blind child is so often pampered or neglected at home he has had very little, if any, experience following directions. He has no incentive to want to pay attention or to remember things. Action games, guessing games, and memory games will stimulate thinking and will extend and enrich the childs oral vocabulary. The following are especially helpful:

1. For teaching left and right use the game "Looby Loo"
2. For teaching prepositions have the child put an object in, on, under,

[1]"The American Singer" Book I, American Book Company, New York, Chicago, Dallas, etc.

beside, below, above, or behind the box

3. For teaching adverbs have the children walk quickly, slowly, quietly, or noisily
4. For teaching verbs have the children walk, run, hop, sing, and so on; ask these questions: What can a boy do, a girl, a mother, a father, a dog, or a cow?
5. For remembering details have one child describe an object and have others guess what it is
6. For giving practice in following directions and for giving memory training have the child place objects according to directions; for example, the teacher may say, "Put the little car on the chair. Now tell what you did."
7. For memory training place two or three toys or objects on a table; have the children feel these objects first and then ask them to name them; increase the number of objects until they can remember five or six names; vary this by placing several things on a table and after the children feel them remove one and have the children tell which one is missing; another variation requires the first child to name something to eat; the second child names the first food mentioned and adds another; this can also be continued until a sequence of five or six items has been given.

The proper climax to all the activities discussed should be a genuine desire to read. Up to now the children are conscious of the fact that the stories they like so well come from a book. Those with partial vision have enjoyed looking at picture books and have described the pictures to the blind children. The totally blind child has handled scrap books of "pictures" made with a tracing wheel or "pictures" cut from tagboard and pasted on the pages of the scrapbook. They have learned some of the names which appear on desks, tables, and chairs. They have learned the names of labeled objects and models in the room. In this way they have become familiar with the tactual form of a few braille words.

Upon the completion of the reading readiness preparation, the children enter the first grade. Here more formal reading activities are introduced. The work should be so organized and presented that each child feels a definite need to read. Bulletin boards placed at the proper height for comfortable, fluent reading are almost a necessity. Besides names, announcements, words, phrases and sentences, even pictures with the description thereof in simple braille terms can be posted. Short stories of two or three sentences dictated by the children are good bulletin board material.

In preparation for actual reading the words and phrases for drill are taken from the pre-primer which they are to study. It is understood of course that the teacher does not use the exact wording of the sentences as they occur in the book because the child may memorize the material. Even the order of the words and phrases on the individual charts must be changed often.

To establish good reading techniques from the beginning the teacher must require the pupil to sit in a proper reading position, to keep the book parallel to the front of the desk, to hold the reading fingers at a slant which makes them form an acute angle with the line of braille they are reading, to move the fingers

lightly across the words, to read with both hands, to finish reading the line with the right hand while the left glides back to the beginning of the next line, and to see the word as a whole and not letter by letter.

By learning new words as wholes, the child progresses faster in his early attempts at reading. The teacher must see that this beginning touch or recognition vocabulary is well established. After he learns to recognize a word he needs practice to learn to recognize it at a faster rate of speed. Word games will speed up recognition. Many of these games and devices will be found in books and magazines.

As the child progresses in his reading, the new words to be learned are taken from the vocabulary of succeeding lessons and books. New words should always be presented in context. New words must be introduced gradually. If too many words are introduced at one time the child will become confused and fail to get any of them clearly in mind. The child, however, must not only be able to recognize the words in context, but he should be able to identify them accurately when he depends on form alone. The teacher must keep a record of individual difficulties and give extra practice to those who need it.

By means of oral reading the teacher can determine whether the child can read all the words in that particular exercise. Re-reading an exercise is good practice if the child actually moves his fingers over each word as he says it and does not just put his fingers on the first word and repeat the rest from memory. Repeated association of the feel and the sound of the word will enable the child to increase his speed of recognition. Children enjoy audience situations and these require oral reading.

Silent reading, too, has its place in the early part of the reading program. Silent reading encourages the child to think for himself by learning to read with a purpose. Finding the line that says, "Mary is playing house," is one form. Finding the line that tells what Mary is doing is another.

The real purpose of silent reading is to reduce vocalization and to encourage the child to read faster. In his book, "The Psychology and Teaching of Reading," E. W. Dolch says, "Anyone becomes a silent reader just as soon as the mental process of comprehension goes too fast for the pronouncing to keep up with it."[1] To accomplish this he advocates that the teacher use interesting material for silent reading to encourage the child to push on. This he can do if the reading consists of many familiar words. Next comes quantity reading which gives the necessary repetitions of the individual word associations which produce the fast and silent reader. Using books scheduled for lower grades is good practice.

When the children have made enough progress in their reading to read simple material independently then a daily free reading period should be provided during which every child must get a book from the reading table or the room library and read it. The teacher may help him in his selection. She should move about to see that each child is reading and to tell him the words he asks for. She may ask an occasional question about the story the child is reading. After the teacher dis-

[1] E. W. Dolch, "The Psychology and Teaching of Reading," p. 163 The Garrard Press, Champaign, Illinois.

covers a child's real interests she may suggest other books dealing with those interests. This free reading period should extend through the primary grades and even later.

The reading program for the elementary grades must include phonic training. A certain amount of ear training has been given in the pre-reading period. This should be continued during the first half of the first grade. Most authorities feel that when the child has acquired a touch vocabulary of 60 to 100 words he is ready for phonics. Since there are several types of phonics programs and since all have their good and their weak points it seems unnecessary in this article to go into detail about any one method.[1] Since children vary in their ability to develop sounding skills and since the teacher must adjust her program to meet these individual differences it seems advisable to list the most important items in phonics that the average child should know when he completes the third grade, without making a definite grade placement for them. The child should learn the single consonant sounds except b. d. g. k. and hard c which should always be sounded with the vowel that follows. He should also learn the consonant blends, the consonant digraphs such as ch and sh, the short and long sounds of vowels, the final e rule, the double vowels, diphthongs, soft c and g, derivatives, and the principles of syllabication.

While this training in phonics will enable the child to unlock new words by sounding, he must also learn the meaning of these words. Therefore every effort should be made to increase the childs vocabulary. To make it a really meaningful vocabulary, avoid pure verbalism whenever the child can be given some tactual experience to explain the word. A curiosity about word meanings should be developed and children should be encouraged to form the habit of asking the meaning of words they do not understand. Since reading is a thought getting process it is easy to realize that if a child does not understand what he is reading he will soon lose interest.

The second and third grades comprise the period of rapid progress in fundamental attitudes, habits, and skills. At the close of this period if good reading mechanics are more firmly established, if the child has learned enough phonics to unlock the many words he meets in his everyday reading, if he has formed the habit of reading for personal enjoyment, and if he is able to find things out for himself from his reading, the primary teachers have succeeded in helping the child to accomplish his aim, namely, to learn to read and to read to learn.

[1] "How to Teach Phonics" revised edition by Lida M. Williams, Associate Professor of Education and Supervisor of Kindergarten-Primary Education, Northern State Teachers College, Aberdeen, South Dakota. Hall and McCreary Company, Chicago. (This paper back booklet of 80 pages contains some very valuable material for the first three grades.)

READING GOALS IN THE NEW MEXICO SCHOOL FOR THE BLIND

1. To extend and enrich the child's experiences and to increase his understanding through the vicarious experiences made possible through reading.
2. To develop desirable interests and tastes which will lead to the habit of voluntary reading from diversified fields.
3. To instill proper attitudes and desirable character building traits.
4. To develop the necessary skills for successful oral and silent reading.
5. To develop a well-balanced personality.
6. To provide a basis for the worthy use of adult leisure time.

General Reading Objectives

1. To teach the proper mechanics of reading.
   a. Position of hands.
   b. Position of book.
2. To initiate and develop habits and abilities.
   a. To teach proper care of a book.
   b. To develop efficiency and facility in the use of the table of contents.
3. To drill on and review essential words in silent reading.
4. To provide vocabulary training.
   a. By finding words of similar meaning.
   b. By finding words of oposite meaning.
   c. Different uses of same word.
   d. By supplying word completion exercises.
5. To improve oral reading.
   a. By creating an audience situation.
   b. By group to group reading.
   c. By individual reading selections of own choice.
6. To emphasize clear enunciation and pronunciation.
7. To teach pupils to read smoothly and fluently.
8. To develop the habit of looking for meaning in all reading.
9. To give training in reading to get the main idea.
10. To follow directions, recall, find a specific part, prove a statement, or dramatize a well-liked lesson.
11. To teach sequence of events.
12. To develop habits of observation and discrimination.
13. To utilize in further activities ideas gained from story.
14. To provide incentives for discussing and re-reading selections from the story.
15. To stimulate interest in a wide range of reading activities.

Suggested Outcomes and Abilities for Pre-First

1. Minimum speaking and comprehension vocabulary of approximately 600 words.
2. Previous experiencing of activities about which he will read.
3. A knowledge that embossed symbols have meaning and will afford pleasurable experiences.
4. A healthy interest or curiosity to stimulate a desire to learn to read.

Factors That Influence Reading Readiness at the Pre-Reading Level

ENVIRONMENT

1. Language spoken in home
2. Educational level of home
3. Stability of the home

MATURATION

1. Chronological age
2. Mental maturity
3. Emotional maturity
4. Social maturity
5. Physical status
6. Speech

Objectives for Readiness to Read

1. Breadth of experiences
2. Language development
   Adequate use of English: speaking vocabulary, accurate enunciation and pronunciation, use of English sentences. Comprehension of English; meaningful concepts, understanding and interpretation of stories heard, of conversation, of objects, of oral directions, and the application of ideas to problems.
3. Audio-tactual-motor skills; tactual and auditory discrimination, sound blending, tactual-motor control, directional orientation, tactual-auditory recalls.
4. Study skills: desirable work habits.
5. Personal-social adaptability: care of self, satisfactory participation with a group, desire to read, wider and deeper interests, desirable attitudes, stability and self-confidence.

Suggested Outcomes and Abilities for Grade One

INITIATORY HABITS AND ABILITIES —BEFORE BOOKS

1. Ability to tell own experiences to the group, using complete sentences.
2. Ability to read from left to right and to find the beginning of the next line by making proper use of both hands.
3. Word recognition.
4. Ability to follow oral directions.

HABITS AND ABILITIES—WITH BOOKS

1. Habit of looking for meaning in all reading.
2. Ability to recognize words and phrases through association, context, likenesses and differences.
3. Habit of reading words rather than letters.
4. Habit of reading with a minimum amount of vocalization.
5. Ability to find key sentence or word in a specific part of story.
6. Ability to express the essential thought of the story in complete sentences using new words accurately.
7. Ability to recognize by touch the 100 words occurring most frequently in basal readers.
8. Ability to handle books properly.
9. Ability to follow brailled directions.

Suggested Outcomes and Abilities for Grade Two

Begining of period of rapid progress in fundamental attitudes, habits, and skills.

1. Good reading mechanics more firmly established.
2. Recognize at touch all words representative of second readers.
3. Read short, easy poems.
4. Read for own enjoyment.
5. Ability to reproduce orally, happenings and events in a sequential order.
6. Ability to read orally in a natural manner, with good expression, observing proper thought unit, with a fair degree of speed.
7. Habit of using correctly the new words of the text when reproducing the thought of a selection read.

Suggested Outcome and Abilities for Grade Three

Continuation of period of rapid

progress in fundamental attitudes, habits, and skills.

1. Increased power of reading silently for a definite purpose and for general comprehension.
2. Study a selection of several pages and read aloud for the enjoyment of the class.
3. Read without confusion of braille symbols.
4. Recognize at first touch at least 500 words, from third readers.
5. Recognize all punctuation marks used in third readers.
6. Choose reading material of a special interest to self or group.
7. Read poetry in a pleasing manner.
8. Habit of reading for personal enjoyment.
9. Habit of using the table of contents.
10. Habit of looking for new and effective ways of expressing thought.

Suggested Outcomes and Ability for Grade Four

Period of wide reading to extend and enrich experiences and to cultivate important reading attitudes, habits and tastes.

1. Experiences of pupils extended.
2. Thinking powers quickened.
3. Wide variety of interests and tastes in reading cultivated.
4. Foundation for study habits laid.
5. Ability to use the keys to pronunciation as found in glossaries.
6. Ability to locate words in dictionary through the use of guide words.
7. Ability to skim rapidly to locate answers to specific questions.
8. Ability to comprehend and express the main thought of a paragraph or story in a brief statement.
9. Ability to select facts which prove or disprove a statement.
10. Ability to make simple reports on materials read.
11. Ability to use the index as an aid in locating needed material.
12. Habit of using correctly the new words of the text when reproducing the thought of a selection read.

Suggested Outcomes and Abilities for Grades Five and Six

1. Ability to gather for a definite purpose, information from reference books.
2. Ability to make a simple oral or written paragraph summary of a selection read.
3. Ability to assemble and evaluate facts which prove or disprove a statement.
4. Ability to read maps and graphs as aids in interpreting informational material.
5. Ability to comprehend statements of problems in ascertainnig arithmetical facts and processes necessary for their solution.
6. Ability to vary rate of reading with respect to nature of materials and purposes for which read.
7. Habit of determining the correct pronunciation of unfamiliar words through the use of glossary or dictionary.

Suggested Outcomes and Abilitiess—Grades Seven and Eight

The period of refinement of specific reading attitudes, interests, habits and tastes which should lead to intelligent use and enjoyment of literature and current events material.

1. Habit of extending and refining vocabulary through noting and using more precise and expressive language.
2. Habit of using all aids provided for interpreting and using books: author,

date of publication, preface, and introduction, legends, keys, tables, diagrams, maps, graphs, and book lists.
3. Ability to locate information quickly in encyclopedias, through a knowledge of alphabetizing.
4. Ability to use and compile a bibliography.
5. Ability to comprehend and express the real thought and intent of a book or selection through reporting, writing book reviews, and annotations, discussions, preparing a dramatization, advertising a book, evaluation of setting and characters.
6. Ability to discriminate between good and bad types of material.

Teachers should check all objectives for preceding levels and use them.

Equal thought and attention to each of the following:

1. Developmental reading.
2. Remedial reading
3. Recreatory reading.

CREATING A NATURE INTEREST IN THE KINDERGARTEN

CAROLYN B. COCHRAN, Perkins

It was my privilege to teach kindergarten children at Perkins Institution for the Blind, Watertown, Mass., for twenty-four years. Our thirty-four acres of landscaped grounds beside the Charles River, with private pond, offered an ideal location for nature study.

When the children first entered school in September, I found they were less homesick if we spent a large part of the day out of doors, getting acquainted with the grounds and fine playground with sandbox, swings, junglegym, and slides. Every pleasant day we walked through the grounds. Dr. Edward E. Allen, while director, planted trees and shrubs of every description and I tried to teach the children to distinguish as many varieties as possible.

The pond afforded a fine opportunity for outdoor activities summer and winter. The children all had rides in the rowboat. There were some choice pond lilies we examined. They enjoyed hearing the frogs and holding them in their hands. It was here we heard the first robin on Lincoln's birthday and later many other varieties of birds. The first pussy willows grew there and many wild flowers. They picked dandelions, daisies, and violets. It was fun to have a cookout with the outdoor fireplace with wood the children picked up. A sandy beach made wading possible. Of course, winter brought skating and coasting.

During the year various trips were taken. I always took the children to Newton to hear the waterfall. They liked to put their hands in and feel the rushing water. Summer days we sailed boats and threw stones in the Charles River. The trip to Norumbega Park was enjoyable, where we could feed the tame ducks. Another day we went to Echo Bridge where the children enjoyed hearing their calls repeated seven times.

A visit was made to the Wellesley Farms Dairy. The cows were such pets that they stood perfectly still while the children felt of them. They were inter-

ested to learn that the cows had to be milked three times a day because they gave such a quantity. Some milk was being sterilized, so that process was explained and the bottles were put through the sterilizing machine for us to see. The surprise came when every child was treated to a little bottle of milk and a straw to drink through.

After learning about wheat being made into flour we visited the Perkins bakery, where the baker let each child roll out some dough, cut out gingerbread men and cookies and bake them in the large oven. They felt the heat from the large oven and learned that 125 loaves could be baked at once.

A maple tree was tapped and syrup made. Original stories were written about these trips, and the boys and girls were proud when I would read their stories from the collection.

Every child learns a lot from pets. One year we had a small turtle all winter. The children fed him and let him crawl on their hands. Some goldfish were given us, but I feel that blind children should have pets they can handle. We had tadpoles from the pond. The children enjoyed our canary and they fed the wild birds and squirrels at our feeding station. One year we had white rats and mice for pets and the children also played with the goats on the grounds.

Perkins has a wonderful museum of stuffed birds and animals. We could borrow them for our schoolroom, or visit the museum.

The kindergarten group derived much pleasure from their farm unit. Our beautiful grounds afforded an ideal setting. It was my purpose to have the children realize through personal experience the relationship of the farm to the three needs of man, namely: food, shelter, clothing. Everyone must eat to live so the children decided that the farmer's work was more necessary than any other. The farm animals give us food and clothing so we must give them proper care.

In the fall the main interest was harvesting. We visited the large vegetable gardens and learned all we could about them. Later we brought in beans, beets, carrots, turnips, tomatoes, corn, peppers, cabbage, onions, squash and pumpkins and learned to distinguish them. Some were eaten raw. Jack O' Lanterns were made from the pumpkins. Rhubard was gathered and cooked on an electric stove, earlier in the season. A collection of nuts was made and sorting games played.

There are many fine fruit trees on the grounds. Visits were made to the pear orchards. We also examined apple, peach and quince trees. Green and purple grapes were picked. Methods of canning and storing food for the winter were studied.

We visited a lumber yard and saw the great piles of lumber as they came from the mill. Later in the year a house was built in this vicinity and we were able to watch its growth.

With our Trace building blocks a farm house was made with a porch, doors, windows, a slanting roof with dormer windows and a chimney. There were shade trees on the lawn. The barn accommodated a toy horse and wagon. Sometimes the wagon was loaded with hay, bags of grain or vegetables. Smaller houses were made for toy hens and a pen for the pig.

For three years we saw the sheep shorn at Brighton. In connection with our unit we made ice in the winter by filling cans with water and leaving them out over night. We put the can in hot water in order to have a solid cylinder. Ice was

made in the electric refrigerator to show the contrast between old and new methods.

Soon after Easter we were ready to study the Spring aspect of our unit. Each child had his own little flower pot with his name on it. We collected a few pebbles to put in first, then we put in the soil and planted six beans, covering carefully. Every morning when the children came into the schoolroom they were eager to water their beans.

At last the day came when the first plant appeared in Arthur's flower pot. The plants were measured later, with a ruler. We grew lettuce and radishes outside.

Now, Jenny comes on the scene, she was the Perkins horse. Some of the children had never seen one before and were amazed at her size. We visited her in her barn and saw her food. The boys had a thrilling ride in the cart. One of them said: "We went bumpty bump then bumpty bump again."

The plowing was very interesting and the children examined the plow which had been left for them in a furrow. After the fertilizing and harrowing, the soft ground was ready for planting.

Modern tractors and farm machinery were talked of. The two power lawn mowers were examined and it was shown how much more grass could be cut with these than with a hand machine.

The older boys had hens and chickens which the young children enjoyed, and they helped gather the eggs.

We had a miniature farm on a large table in our school room. It changed with the seasons.

In the fall hay was collected to put in the barn, corn stalks were stacked. Small pine trees were really growing around a house the children built.

During the winter we covered our farm table with a sheet and had a snow scene. A boy was skating on the pond.

In the spring our farm turned green once more. New pine trees were planted. A garden was made with brown plasticine to represent the ground, tiny green balls represented cabbage, a plasticine man was hoeing the garden. Another man was patting his dog. A man was fishing beside the pond where ducks were swimming and a boat lay on the shore.

Plasticine flower gardens bordered the stepping stones coming from the front door of the house. Stone walls enclosed some of the fields. There were pigs in the pig pen, sheeps grazing. There was a wood pile at the back door. The well was made of plasticine rocks.

In later years when meeting the children, they speak of these experiences, so I feel that it was all well worth while.

THE READING PROGRAM IN THE MIDDLE GRADES

RUBY BROWN, New Mexico

The problem of teaching blind children to read effectively has been the subject of experimentation and discussion for years. The solution of this problem involves many factors, some being generally recognized and employed while others are unknown to many teachers; otherwise, reading as a whole would be more

satisfactory. Tests show that the general level of braille reading is low but that the median rate of some classes is almost twice that achieved in the same grade in other schools. Hence, it is probable that reading rates can be raised by the use of improved methods and better instruction.

Recognizing the need for a more progressive and effectual reading program in the New Mexico School for the Blind, the Superintendent appointed a committee in October, 1946, to study the particular reading needs of the school and to formulate a more adequate reading program. The program adopted includes general goals and objectives for the school, specific goals and objectives for each grade through the eighth, reading lists for recreational reading from grades three through twelve, and articles giving specific information as to the methods of teaching reading in the various grades.

The majority of the pupils in the fourth, fifth, and sixth grades of the New Mexico School are Spanish-American. Most of them come from rural communities; consequently, they have been deprived of many cultural and social advantages. Speaking in one language at home and studying in another at school is definitely a handicap. Spanish-American pupils do not present all of the problems of the reading classes but many are found with limited vocabularies, a narrow range of experiences and poorly developed reading habits.

It is imperative that only desirable reading habits should be established from the beginning. To insure the formation of such habits and in order to build a proper reading foundation, it is advisable for the teachers of reading in a school to outline a procedure by which to govern their teaching.

The reading committee agreed to require the pupils to sit in a proper reading position, to keep the book straight on the desk, to read with both hands, to finish reading the line with the right hand while the left goes back to the beginning of the next line, to see the word as a whole and not letter by letter, to move the fingers lightly across the words, to be sure of a word before saying it, to read smoothly by phrases, to pronounce the words correctly and distinctly, to read with expression and to observe the punctuation marks. The teacher should be cautious about emphasizing mechanics to the extent of retarding progress.

The teaching of the actual mechanics of reading begins in the primary department but it should be continued in the middle grades if necessary. When a pupil has received proper training in the lower grades and still reads poorly, it is probable that his inability to read is the result of physical or emotional disturbances, mental disabilities, language difficulties, lack of tactual sensitivity or a combination of these factors. In any case, every effort should be made to determine the causes of the pupils' reading problems and to remedy them.

First, the teacher should make an effort to know her pupils. She should become familiar with their state of health, family background, and with the records of their previous school work. Standard achievement and intelligence tests will show the varied mental abilities of her pupils and will aid in the further diagnosis of their reading needs. If such tests are not available, carefully planned tests based on the material in the readers are recommended.

Motivation is still an important factor and while there is no set technique, the more varied the devices used, the greater the number of interests stimulated. Practice during the reading period is not sufficient to make a skillful reader; therefore, voluntary reading is indispensable. Pupils should be so conditioned that they will want to read. "When a teacher has created real interest in her work, her hardest task has been accomplished."

Dramatization is a successful method of motivation. It affords a splendid opportunity for instruction, develops imagination and initiative, and gives confidence to the more timid pupils.

Another effective means of motivation is the true audience situation. This may be provided for by giving the pupils permission to invite visitors to the reading class, by reading selected sections aloud to classmates, and by reading an occasional story to another grade.

I will cite a personal experience which will serve as a concrete example of motivation which proved to be effective for a particular group. Three years ago I had a fourth grade reading class that required more stimulation than usual. Animals proved to be the common interest of the class so the first lessons were about animals. The pupils participated in a general discussion and some of them related experiences with pets at home. Animal stories were read on the Talking Book and the sound effects were particularly appealing. I told and read animal stories and provoked discussions. Most of the pupils had limited interests so more reading and story telling was done than in former reading classes. Provisions should be made for differences in reading abilities and interests. Material should be devised based on familiar experiences which is commensurate with the pupil's reading ability and which will develop balanced reading tastes. Ideally, pupils should not be expected to read in the same book but when a book is read by an entire class, the reading level of the book chosen should be near the average reading ability of the group. It has been recommended by the 1944 Committee on the Literary Course of Study that books of low vocabulary and high emotional maturity be provided for pupils of low mental age. The resolution has not yet been carried out but the committee offers a list of Braille books which have a relatively low vocabulary level with more advanced plots. An abundance of easy reading material should be made available for all pupils. After the completion of minimum assignments, it is advantageous for the more self-directed pupils to choose their books. Recreatory reading should be included in the reading program and the teacher, in order to guide wisely, should be familiar with the books provided for her pupils.

Lesson assignments should be short and definite. Pupils should know exactly what is expected of them. The teacher should insist on absolute accuracy. "Accuracy first, speed afterwards."

Beginning with the fifth grade, at least, pupils should learn to vary their rates of speed in accordance with the nature of the material. For instance, an article on trees should be read more slowly than a story about a boy and his dog.

Special attention should be given to reading by phrases and groups of words. Pupils should be taught that "a" and "the" are not the names of things but that they are little words that point out and should always be put with the words

that follow them. Basic words such as, "when," "what," "this," "that," and "then," should be read in a group of words. Word by word reading should not be permitted; it retards speed and has no meaning.

It is essential that pupils develop effective habits of word recognition. If a pupil understands and knows the sounds of letters and diphthongs, he will have less difficulty in 'sounding out" the words in his reading lesson. Authorities do not agree as to the extent of phonics training but the majority approve practice on the most frequent phonetic elements. Phonics is taught in the primary grades but a repetition of drills by way of review is helpful for some fourth grade pupils. It is necessary to pronounce new words which children cannot be expected to know. Pupils should be taught to compare words to note likenesses and differences, to recognize part of a known word in a new word, to learn some of the new words by sound and from the context. In some instances, word recognition may be taught in connection with vocabulary building.

The importance of vocabulary building cannot be overemphasized for young children who use two languages. This is especially true when pupils hear or speak little English during the summer months.

The following are suggestions for vocabulary development: teach new words in connection with new experiences; study new words which will be found in the next reading lesson; ask the pupils to select nouns, verbs, or other words from simple word lists; designate words to be placed under general headings; use synonyms; and play appropriate games. Wide reading is also an aid in expansion. Most readers contain a glossary from which the meaning of unfamiliar words may be learned. Many words, however, are not to be found in the glossaries. To find these words, the pupils must learn to use the dictionary. If the teacher will begin by giving the pupils exercises in the alphabetizing of words, progress will be more rapid when the actual dictionary work begins. It is beneficial for pupils to keep a list of unfamiliar words, which are not found in the glossaries, to be used when they have access to the dictionary.

In the fifth or sixth grade pupils should begin to learn the braille diacritical code. First, they should learn what is meant by the accent mark and practice using it in words in which they are sure of the correct pronunciation. Then the teacher should give the pupils a list of words which are frequently accented incorrectly and ask them to get the correct pronunciation from the dictionary.

Evaluation and analysis of material read should receive emphasis in the middle grades. Pupils should learn to distinguish the important statements from the unimportant. The summarization of paragraphs and stories, and the summation of facts about a book as a whole, help to teach discrimination. Another aid in developing discrimination is the formulation of a report from at least two sources. This is particularly helpful in teaching the pupils which items pertain to a certain topic. It might be wise for a pupil to write the important information from both articles and then combine the material, with the help of the teacher, into a unified report.

Comprehension increases with efficiency in reading. As pupils progress in the middle grades, the power to comprehend is expanded through increased word per-

ception, greater speed, and advanced techniques.

The reading committee found that one of the most pressing problems lay in the pupils' general apathy toward reading of all types. As a stimulant to reading, a reading club was organized composed of a younger and an older group. The younger group included pupils from the third through the seventh grades and those in the sight-saving and the ungraded classes. Pupils from the eighth through the twelfth grades formed the older group. Each group was organized separately with a President, a Vice-President and a Secretary. The second year it was decided that only one group was necessary. Membership in the club was voluntary, each member agreeing to read a minimum of one book per month. The pupils responded well and membership increased the second year. The club meetings were usually held on the first Sunday afternoon of each month.

Realizing that entertainment was a vital factor in sustaining interest in the club, and hence in reading, the committee and the club officers endeavored to make the activities of the club as enjoyable as possible, even to the serving of light refreshments.

Some of the outstanding club activities included the following: selected readings, chiefly humorous, by a talented woman from a near-by community; a picnic at the White Sands with prizes for the best stories and jokes told by the club members; a Valentine party; a record program including phonographic dramatizations of Dumas' **The Count of Monte Cristo** and Kipling's **Jungle Book**; sound movies of **Huckleberry Finn** and two educational "shorts"—one, the first industrial technicolor film on steel and the other a production of the H. J. Heinz Company; a club sponsored Lincoln's birthday chapel program; and a Spanish musical program presented by a group from the Alamogordo High School.

Members of the reading club showed a continued, undiminished interest in the club's activities and they read much more than formerly. Prior to the organization of the club, many of the pupils read as little as one book per month, and some even less. Now reports show that some pupils read as many as seven or eight books each month.

The increase in the amount of reading done by the pupils, and the cooperation of the teachers in devising a program for the best interest of the school as a whole, make the committee feel that its work has been worthwhile.

STEPPING-STONES FOR GLORIA

By
HELENA DRAKE, Perkins

Many children are physically and mentally equipped to start their journey through life on the main highway, but there are those, who if they are to travel the highway successfully, must be guided to it over well chosen stepping-stones. Physical handicaps with their accompanying obstacles may retard the child's mental growth so that the distance over the stepping-stones may seem long, but Gloria is proving that the main highway can be reached.

At the age of six Gloria entered the "B" division of the first grade. She had no vision, was very immature, and generally unadjusted to normal living. She had accomplished little in the kindergarten, and at a glance one might say that the path ahead did not look promising. Was this child mentally deficient, or was she just drifting along in a world of her own because of a sense of insecurity and a lack of careful guidance? Let us scan a few pages of her past so that we may more understandingly watch her development.

"I would like to care for my baby, but my husband doesn't work much. When he does work he drinks. Poor little Gloria can't see, and what shall I do."

The welfare worker looked kindly at the distressed mother. She noticed that the home was neat but poorly furnished, and that the mother and three other children were clean but undernourished. Taking the mother's hand she said, "Would you like to have your Gloria go to a nursery for blind babies? There is one not far from here."

There were tears in the mother's voice as she replied, "Yes, my husband will not try to help, and my baby must have care."

Arrangements were made, and Gloria at the age of four months entered the nursery. Her physical needs were well met, but she lacked the mother-love and the security of home which are extremely important in the development of a handicapped child. Mother was too poor and too busy with the other children to visit her baby often, and at the age of five Gloria was sent to Perkins Institution to be educated.

So we follow Gloria to grade 1-B. As she takes her seat in a group of seven children, we look around the room. A notebook is open on the teacher's desk, and glancing through its pages these pertinent remarks attract our attention.—

"First of all it is important that the teacher is really interested in her pupils. She should make them feel that she is working with them, and that she believes that they can succeed if they will work hard enough. If there is to be progress the teacher must go down to the pupil's level of understanding, no matter how low, and build up from that point. Then the educational material presented must be appealing and of a type in which the pupil can meet success . . .

"Using much tactual material helps to dramatize dry subject matter, and creates an atmosphere of interest. Through interest, slow as well as bright children, gain confidence and it is our job to provide this important stepping-stone for progress . . . . .

"The teacher should find the path to meet the individual pupil's need, then through the child's interest, and her encouragement, the pupil should gain a desire to make his own way. . . .

"Youngsters should not be judged as mentally deficient until it is clear that their mental growth has not been retarded because of illness in childhood, spoiling at home due to the handicap, limited play experience or foreign parents. . .

"Slow learning children should not be considered inferior either by the teachers or pupils of the school. They should be made to feel accepted so that they may gain a feeling of security. A sense of security is a valuable stepping-stone in development. These children need understanding and guidance, and if interest can be kindled, success in study will grow. Kindling interest is indeed necessary for retarded blind children. . . .

"Nothing can take the place of mother-love and home security during the preschool years. However, if these valuable stepping-stones have been denied a child,

a classroom with a simple setting offering dramatized activity and an atmosphere of confidence will help in guiding a pupil toward normal living. . . ."

Most of the first day's program was spent in getting acquainted. After school the children lingered to locate and examine the different objects about the room.

"Come over here boys," John shouted eagerly, "and see this board I've found. It's got different locks, electric light plugs and buttons, faucets, screws and everything on it." Betty found a ball, but when she bounced it on the floor it rolled away from her because her coordination was too poor to catch it. But she soon found an abacus on the table and started to count the beads. "Why, there are fifty beads on these wires," she said to Helen, and Helen immediately began counting to see if Betty was right. On the tables the children found various devices for number games. There were little glass jars in which pennies could be counted, beanbags, jumbo dominoes, block boxes with three sections in which number combination games with marbles or inch blocks could be played. Mary found a xylophone with a stick attached which took all her attention. "We'll use that in an arithmetic game," the teacher said. "It's lots of fun. When you learn how to clap the numbers you hear struck on the xylophone, you can play that you are the teacher and strike numbers for the pupils."

"It's going to be lots of fun," Barbara said. "I'm coming in as soon as the first bell rings so that I can play with these things before school starts." "So am I," chimed in the other children; that is, all but Gloria. The gold fish were all that interested her, and she was very anxious to give them something to eat.

The gold fish were in a glass bowl on the window sill and near them was a geranium with a small pitcher for water. The fish and the plant soon proved to be very popular with all the children. They were allowed to care for them as a reward for obedience and good work, and during the winter the window sill became crowded with dishes of bulbs and small pots containing seeds which belonged to individual pupils.

Another incentive for progress was star charts. Each child had a chart hanging on the wall which would be gradually decorated with different colored stars marking the achievements in each subject. Wisely organized competition was encouraged in this classroom. The teacher thought it stimulated interest and through it one learned to be a good sport and to depend upon himself.

After the children had gone out to play the teacher felt pleased that they had shown such interest in the classroom equipment. She thought their manipulating of the gadget board would develop their hands, and that learning to bounce the ball in number games would help coordination. All these number devices could be used in dramatic play, making arithmetic become meaningful as well as a fun experience.

Gloria continued to have a listless attitude. During the pre-school years her hands had been idle and now it took too much of an effort to make them work. The chief thing that she liked to do with her fingers was to put them in her eyes and this mannerism, together with her poor posture, certainly did not make her appear attractive. She loved to be read to and her comprehension was good, but she showed no real interest in learning how to read or write.

One day Mary said to the teacher, "Gloria goes in our rooms and takes things out of our bureau drawers." And Gloria, who always had an answer when she was corrected, replied, "Well, I haven't

anything in my bureau drawer to play with except a comb and brush."

After that the child was often given some little thing that she could have for her own, and she was sometimes taken on a little shopping trip where she could have special attention. When June came it seemed that Gloria had not grasped many of the things to which she had been exposed. Whatever seeds that had been sown were still rooting because there was very little outward evidence of progresss.

"I suggest that Gloria try grade 1-A in the fall," the teacher said to the principal. "With the start she has made, the more alert pupils may be stimulating to her."

In September we find that there is a new teacher in 1-A, and when she sees Gloria sitting in her class she thinks the child will not fit in the group so she asks to have her sent back to 1-B.

So Gloria went back to 1-B for more fundamental training. From the very beginning of the year the teacher noticed that there was a change in the child's attitude toward learning. Her interest had been kindled and she was showing a desire to compete with her classmates. The teacher was pleased with this new step in development because she knew that no matter how well she might try to teach the fundamental subjects, if a child did not have the desire to learn, very little could be accomplished. Perhaps Gloria felt a little superior to the new group of children and this was giving her confidence. There was a very important factor, too, which the teacher discovered one morning when Gloria was telling the class about her summer at Camp Allen. "I had a grand summer, even if I did have the measles," she said. "The camp mother was kind to me. She is my friend, and I have other camp friends, too."

"Yes," the teacher thought, "the personal touch, the sense of security gained by contact with understanding friends both at school and camp are perhaps the strongest influences that are stimulating our Gloria's development,"

As the days passed, Gloria continued to gain ground. She was allowed to move at her own speed so that in reading and writing she kept ahead of her class. She entered into class discussions, and in group activities she was a leader. It did not seem possible that this was the same child, who during her first school year had read but one pre-primer, and because of her poor coordination and lack of application had learned to write only three of the simplest Braille letters.

"In considering Gloria's progress," the classroom teacher writes in her notebook, "I feel more strongly than ever the importance of laying a thorough foundation on which the tool subjects may be developed. Without the aid of this invaluable stepping-stone, pupils may slip along through the grades, but they will gain little confidence and **much** discouragement."

The next fall, after another summer at camp, we watch our traveler taking her place in grade 2-A. She still appears quite nervous and is not a very good sport about taking correction, but she has a real desire to learn. In the middle of the year her teacher remarks, "Gloria is a good pupil. She understands her work. She is a born reader." So we see the child, who was considered to be mentally deficient in the kindergarten, now marching along with her grade in a normal manner.

This June our little friend is finishing her studies in the advanced section of the third grade. She is still struggling with poor posture and mannerisms, but the knowledge and friends she has gained have given her confidence and a sense of security. Her home-tie is a very slender thread and she has seen very little of her

family since she was taken to the nursery in babyhood. We feel, however, that since she has been able to reach the main highway of learning she will continue her journey on it successfully.

As we leave our little traveler we ask the third-grade teacher what influences she feels have been largely responsible for the change in Gloria's attitude toward learning. "I believe," the teacher answers, "that Gloria's improvement is chiefly due to p a t i e n t, understanding teaching. Through it she has gained a desire to learn, and without this desire she would probably still be drifting along in a world of her own. What has been accomplished with Gloria can be done with many children who have had a poor start in childhood. To kindle that spark of interest on which to build does not require magic, but it does require patience and more patience. If we expect to really help our slower visually handicapped children we must have the patience to guide them carefully over the necessary stepping-stones so that they may gain a proper foundation on which to develop happy, useful lives."

DRAMATIZING NUMBER

By
HELENA DRAKE, Perkins

Miss Merritt felt that a clear understanding of number concepts was to be important in the lives of her visually-handicapped pupils, and she thought that this understanding should come to them through play. Appealing tactual material should be found to take the place of the gay pencil and coloring book. She realized that in her first-grade class there would be varying degrees of ability. There would be some who were very alert, others slow learning, and those who might be considered mentally retarded. The program which she had chosen could be adapted to all, because if number experiences were well tied up with the child's general living, he should early gain a secure educational foothold. Dramatizing number—this was her objective. Through the avenues of activity, sound, and touch, numbers should contribute much to the fun and mental growth of childhood. Miss Merritt wanted her pupils to develop a meaningful understanding of numbers so she hoped that they would gain a right idea of the shape, texture and relationship of each brick as it took its place in a firm foundation of number knowledge.

The school bell rang, the boys and girls were taking their seats, and a shrill voice was asking a question.

"Do you teach arithmetic in this class? If you do, I'm not going to like it. It's no fun—numbers, numbers, numbers—and I never get the right answers."

"Why, numbers are fun," said Miss Merritt to the little boy who had just come to her from another school. "We have fun in here with numbers. They make us laugh and help us to play games."

Charlie was skeptical. "I like games, but no numbers, thank you," he said.

The newcomer was small for his seven years, and the teacher judged from his previous school report that he had found very few things in which he could meet success. She also knew that his general experience had been very limited, and there had been a lack of guidance in helping him to adjust to his handicap during the pre-school years. Stimulating an in-

terest in tactual objects through number games might help, she thought, as she tapped Charlie gently on the shoulder. Her gesture gave him a feeling of friendliness which, because of his lack of vision, he could not have gained from a smile.

Then she said to the little boy, "If you don't like arithmetic, just sit quietly in this chair and imagine you are a visitor." Charlie sighed and began to play with his shoestrings, expecting a very dull period.

"This morning we are going to play the xylophone number game. Who wants to be the first one to strike the numbers?" Everyone sat up straight and raised his right hand. "This game will be fun if we all listen carefully. First I will show you how to play it. I will strike the xylophone a certain number of times and then call on one of you to rise and clap the number you have heard. If a pupil can clap three numbers correctly in succession, he or she may be the teacher. If there is a mistake the hammer will be drawn quickly over all the notes and the person clapping will sit."

John missed the second number by clapping five when six was struck. Mary clapped three numbers correctly and proudly walked up to the xylophone to take her turn as first teacher. So the game went on; nothing was heard in the room except the notes of the instrument and the clapping. The children were not only gaining a number sense, but they were learning how to concentrate. When the bell rang Miss Merritt said, "Tomorrow we will play the same game but we will use a triangle instead of a xylophone."

"O goodie, goodie. I'm going to try and be the teacher! I love triangles!" the children eagerly exclaimed.

And Charlie, who had become more and more interested, shouted, "O may I join the group tomorrow, Miss Merritt?" Everybody clapped, and Charlie felt that perhaps arithmetic wouldn't be too bad in this class after all. Anyway it would be fun to play with xylophones and triangles.

The next morning when the children played the triangle number game some of them were disappointed because they couldn't make a clear ringing tone on the little instrument. Miss Merritt knew that this was due to tenseness. During her years of teaching she had observed that many of her pupils were very tense in their movements, much more so than children who could see. For this reason, through the "play-way" she hoped her pupils would gain a sense of freedom and learn how to relax.

After the second day Charlie was really one of the group, and he gradually learned that work in numbers helped him to have fun both in school and on the playground.

Soon John introduced Charlie to the schoolroom ball, and told him that when he learned how to bounce it independently he would have a lot of fun playing in the ball-number games. Miss Merritt was much pleased that the children enjoyed the ball games because she knew that good coordination of the body and skill with the hands were valuable factors in the development of her pupils. Perhaps the most popular ball game was the one in which a child counted as he bounced the ball. When he missed a count or dropped the ball it was the next child's turn. The winner would receive a flag on his school chart. At first when Charlie made mistakes he wanted to keep right on bouncing the ball. In fact, he was so disagreeable about this that he was asked to leave the group. He soon found, however, that this kind of behavior did not pay and he learned that if one could not be a good sport he must lose the fun of playing the game.

Charlie found that another fun game was dropping pennies into a glass jar—a jar that felt like the one mother kept

face cream in at home. This jar and a box of pennies were passed around the table and each child dropped in five pennies while the whole class counted. After some practice in this way the teacher would call on each pupil to do the penny game by himself. If the child could count correctly thirty pennies into the jar he would receive a gold star on his chart. The children liked the tinkling sound the pennies made when dropped and this gave an interest to counting.

The charts were a great incentive to the children's progress. They hung on the wall and had different colored stars marking the achievements in each subject. When vacation came the children would take them home, and of course each child wanted a chart filled with pretty stars to show mother.

Rhythm had an important part in this arithmetic program. Often after a period of concentrated work, Miss Merritt would open the windows and have the class do exercises with the metronome. The pupils liked the metronome's even tick and they would count measures of two, three, or four while they exercised their arms and legs in rhythmic movements. This number device, together with the fresh air, helped to quicken their thoughts and made them more alert. Charlie was fascinated with the little ticker which could be made to go fast or slow. He loved to jump or clap to the rhythm of the metronome when it was set at fast speed.

In this classroom there were many tactual devices for developing number growth, and these were accessible to the children in their free moments. On the wall there was a large board which contained gadgets such as trunk, window and door locks, different light switches, screws, faucets, etc. Besides teaching numbers this device improved the child's hand skill and added to his general knowledge. Near the gadget board was hung a pasteboard clockface with two large movable hands and twelve clearly printed black figures. Over these figures, which were to help the children who had some vision, were cemented corresponding numbers written in Braille on celluloid paper. Dots on celluloid paper would not rub from constant use so Miss Merritt often used it to mark objects around the room. There was always a ball available for bouncing, and an abacus with fifty beads for counting.

Then there was a block box which Charlie enjoyed and from which he learned how to connect and build numbers. This box was twelve inches long and four inches wide, and it was divided into three sections. There were two partitions, one dividing the box into two equal parts and the other dividing one of these parts into two equal sections. Thirty inch blocks, two deep, could be neatly placed in the large part and from here they were used to make combinations in the smaller divisions. When the blocks were used one of the class was chosen to pass out the boxes and another to collect them when the work was finished. In order to be chosen one must work quickly and quietly. The children enjoyed the little blocks and they were encouraged to work out their own games in building combinations. These games afforded much finger activity and the rattle of the blocks was appealing. They would call the blocks kittens, apples, chocolates, etc. If they would put two apples in one side and five in the other they could easily gain an understanding of the answer because the whole problem was right under their fingers. Through this "play-way" simple subtraction soon became clear to them, and they also learned to make shortcuts by counting by fives and tens.

The jumbo-domino game was very popular with this class. The domino dots went as high as double nines and their deep

pits could be easily distinguished by touch. Charlie called the game "Fish." Each child would take a domino from the pile and if he could tell the combination correctly he had succeeded in catching a fish. There was another domino game called "Bottoms Up" and the use of large dice added a fun interest. Miss Merritt encouraged the domino games because she thought this method one of the best for teaching number combinations. The surface of the domino was small so that the finger could gain a picture of the whole problem very easily.

The next step after counting objects and working out combinations was money games. After the children learned how to distinguish the different coins by touch they played store and had fun going to real stores to buy things. In order to increase interest in making change the teacher introduced a money changer, a little device like the one the motorman uses when he collects fares on the bus. This gadget was mounted on a board and had a standard so that it could be easily moved along the table. The finger activity this device afforded was excellent, and the interest it created made the children strive to learn how to make change quickly so that they could have a turn as storekeeper.

When the class had gained a sufficient number foundation from games and tactual methods they did more and more oral work. They continued to form mental patterns which would enable them to solve problems quickly and accurately as their arithmetic path wound its way up through the grades. By means of the "play-way," associating number facts with objects in general living, they had gained an understanding of number value which could not have been acquired through memorized systems of computation.

Miss Merritt had previously taught in a school for seeing pupils, and she was convinced that the pencil patterns taught in the public school would not be meaningful to blind children. "These pencil patterns stand for memorized systems of computation," Miss Merritt said to another teacher, "and I feel strongly that blind children should develop mental patterns of number values by which they can independently solve their everyday problems. If these pencil patterns of the seeing are adjusted for use on the type and Braille slate they may help our pupils to make their grades in school, but they are not practical in helping the blind adullt to solve the problems which he must meet in the world. Besides being lacking in number value, these slate patterns are awkward and inaccurate."

As the children ascended the school ladder, the time came for them to write Braille figures in their problems. They wrote these figures in a line and added them from left to right. Ex. Add 37 and 42. Ans. 30 and 40 are 70, 7 and 2 are 9. Ans. 79. In subtraction they used the additive method. Ex. 35 from 60. Build up from 35 by 5 and 10's. In both examples just the problem and the answer would be written in Braille.

By the time Charlie reached the fourth grade he could add in his head one three-place number and one two-place number. The general rule he followed in addition was—add in order, hundreds, tens, and units. He could count to one hundred by any number up to ten, add and subtract two figure numbers up to a hundred, and had a good understanding of time, liquid, and linear measure.

In thinking of Charlie, and all other children who dread number work, Miss Merritt writes in her notebook, "I feel convinced that, if our visually handicapped pupils can develop meaningful mental patterns of number values, they will be more independently equipped to take their place in the seeing world.

QUESTIONING THE APPLICANT OF PUBLIC SCHOOL METHODS IN TEACHING ARITHMETIC COMPUTATION TO BLIND CHILDREN

By
MOLLIE CAMBRIDGE, Perkins

Educators of today recognize the need for developing in children an understanding of the principles underlying arithmetical processes. They seek to interest pupils in arithmetic by showing its relationship to daily life in contrast to old-fashioned objectives based on a psychology now held in slight esteem. Despite all the efforts made in recent years to vitalize the teaching of arithmetic in this manner, a surprising number of failures still persist in schools for the seeing. If it is recognized that computation proves difficult for many children with all their physical faculties, how much more evident it becomes in the case of those deprived of sight!

The problems arising from this handicap are several and complex. One of major proportions is created by the fact that blind children first entering school do not have the apperceptive background in numbers commonly found in sighted children of the same age. The reasons for this are two. In the first place, the blind child's power to observe is very limited—being determined entirely upon what he can touch. In the second place, he cannot take in through the medium of touch a total situation and recognize the relation of the parts to the whole. Another problem stems from the impossibility of using blackboards and the impracticability of almost all three dimensional diagrams. Yet another problem is presented when we give due consideration to the inadvisability of encouraging the use of slates for computational work. Because of these problems our whole plan of teaching—our ultimate every-day-life objective, our immediate classroom objectives, our methods and our material—must be specially adapted if it is to be efficient.

Perhaps the most concise statement of our ultimate objective is that we must train the mind of the blind person to replace the pencil of the sighted one. This is absolutely essential since in adult life mechanical aids in solving problems will be almost always unavailable due to their awkwardness. It follows unavoidably that we must modify, and in some cases change completely our methods of teaching arithmetic computation. Patterns of learning convenient to the eye are often far from convenient to the memory. Our classroom objectives, too, must be kept practical. We must give very extensive experience in the comparatively simple computation used by the majority of people in later life—not in the complex computation which is always done with a pencil in the classroom and hardly ever done when out of the classroom. Text books designed for the seeing, if used at all, should act merely as drill books for giving practice in procedures explained previously by the teacher in accordance with methods best suited to the blind. At best such text books are but poor substitutes for sets of examples and problems worked out by teachers of the blind. This is due to the fact that many computation examples must be dropped because of their unsuitability for mental calculation and their lack of practical value for future needs. Consequently they must be replaced by means of dictation in order to afford

pupils sufficient practice. Needless to say the amount of class time thus consumed is considerable.

Many years ago educators of the blind decided that in order to keep our program of arithmetic in line with that of schools for the seeing, the same methods and materials must be used. Hence they caused basic texts to be put into Braille, they determined what type of arithmetic slates should be used, and they created a system of Braille mathematical notations. Blind and seeing children were then taught in much the same manner. Since scientific tests for measuring progress in a given field were not then being administered to blind pupils, teachers could only hope that they were approaching as nearly as possible the standards of schools for the seeing. The use at Perkins in 1933-1934 of the Stanford Achievement Tests in some fields—not arithmetic—showed them to be of value. Consequently tests in arithmetic computation and reasoning were put into Braille for 1935-1936. Time limits were established, and pupils from the fourth to the ninth grades inclusive were tested. The results of these tests were satisfactory in all fields except that of arithmetic computation. Other schools tried the tests with the same results. The tests were examined as to material included and mechanics. It was felt that pupils should be allowed to have more time and to use their arithmetic slates. But a second series of tests given under the condtionss just mentioned showed results almost identical with those first obtained. It was then decided to put more class time on computational drill work with special emphasis on examples involving large numbers. The tests of 1937-1938 showed some slight gains; but they were out of all proportion with the time and effort expended by both teachers and pupils alike. Discouragement led to a minimization of the importance of the arithmetic computation test. Teachers felt it would not be worth while to spend the amount of time required to insure good results. From that time forward more time was devoted to mental arithmetic. Pupils took kindly to it, since they recognized its practical value for them. However the problem of how to improve their ability to compute remained unsolved.

During the war years comparative profile charts showed the defects in arithmetic computation to be great indeed. The dissatisfaction of all concerned led to the formation, in 1944, of a joint committee to investigate the situation thoroughly. This committee met often in 1945-1946 and several hypotheses were formulated. They were stated as follows:

(1) The general objectives of teaching arithmetic computation have been wrong. They have been those established for sighted pupils a decade ago and are not in accord with those more recently established.

(2) Our computational objectives should conform as nearly as possible to those of modern schools for sighted children.

(3) Our methods should not follow those used by sighted pupils.

(4) Because of the nature of their handicap, mental computations are most efficient for blind children.

(5) The processes of mental computation should be analysed to determine one method which will serve the great majority of pupils. This method should be known to all teachers in the school.

(6) The more intelligent pupils will develop their own short cuts once the method is mastered.

(7) Sound graduation requirements in line with best current practice should be established.

The first two hypotheses were checked by teachers who volunteered to study re-

cent literature on aims and objectives in the field. Data on the next four was provided by an analysis of the results of the Stanford Achievement Tests. It was very evident that methods and material used by the seeing did not make good computors of the blind. Some teachers wanted the adapted texts and slates to be discarded entirely. Others felt the slates might still be of value to slow pupils and to those coming from schools for the seeing with patterns of learning already established. Experience proved, however, that in the latter instance good pupils could readily make the transfer from pencil methods to those used by the blind. It did not seem practical to try a control and a variable group. In the first place the number of pupils at any one level of achievement was so small that it would have been almost impossible to establish matched groups. The findings would not have been valid. Furthermore, the techniques of teaching mental arithmetic were not sufficiently advanced to make the experiment valid. The members of the committee felt that the blind ought to be able to compute well mentally since they are obliged to develop both concentration and memory to a higher degree than are most people with sight. The algebra and geometry classes in the Upper School and the alumni were used to gather data on the amount of mental arithmetic used in advanced mathematics and in daily life situations. Most said that they used mental arithmetic exclusively, and some gave interesting demonstrations of techniques they had themselves evolved. The committee felt it would be highly beneficial to have two of the arithmetic teachers—one from the Lower School and one from the Junior High School—serve as supervisors. They could help younger teachers by discussing techniques, by doing demonstrational teaching for them and by advising them how to choose problems of most practical worth to blind pupils. Consideration of the seventh hypothesis led to the formation of a set of minimum requirements in arithmetic computation. These eliminated some text book material which was deemed impractical.

By the means shown above the joint committee felt that it had experimented sufficiently to check the validity of the hypotheses which it had propounded. This general objective had become clear to all: "to develop a program of teaching computational skills by mental arithmetic in the elementary and Junior High School at Perkins Institution." It is now time to put into effect the program which had been worked out. The following is a brief statement of some of the means by which we hope to accomplish this end.

First a bulletin will be issued to make all teachers cognizant of what was done by the members of the joint committee. Meetings of this group will be held less frequently than in the past. From time to time, however, the two supervisors will make written reports to the group on their findings. A good laboratory is to be set up in which all tactual material will be located. In this way it will be easily available to teachers wishing to use it for demonstrational purposes. Research studies on the use made of arithmetic by alumni as well as on other interesting aspects of the work should be carried on as extensively as possible.

Minimum Requirements In Arithmetic Computation

Addition: Add 3-figure numbers to 3-figure numbers in pairs, total sum not to exceed 10,000. In adding money, dollars and cents to be considered separate quantities; consequently amounts up to $999.99 would be considered 3-figures. Drill is required, and reasonable speed with 90 per cent accuracy.

Subtraction: Take 3-figure numbers from larger numbers not exceeding 10,-

000. Emphasize making change. Drill is required. Speed with 90 per cent accuracy should be attained.

Multiplication: Multiply 2-figure numbers by 2-figure numbers. Understand how by building up partial products, 3-figures times 3-figures may be handled. Drill absolutely essential. Speed is more important here, since the "pencil computor" can handle multiplication problems rapidly. Ninety per cent accuracy.

Division: Divide any reasonable number by a 2-figure number. Understand how a 3-figure divisor may be handled. Accuracy more important than speed. Ninety per cent accuracy.

Fractions: Denominators to be limited to 2, 3, 4, 5, 8, and 10 with practically all the emphasis on the first three. Computations with fractions apart from practical problems is discouraged as it usually proves difficult. No problem to contain fractions with more than two different denominators. Division of fractions relatively unimportant but division of a mixed number must not be overlooked.

Decimals: Introduced through dollars and cents. Two-place decimals normally sufficient, but an understanding of 3-place figures is necessary (e.g., baseball averages).

Percentage: Only such work as involves operations listed above.

Square roots of perfect squares to 144. Cube roots of perfect cubes to 125.

The following is a brief statement of the methods advocated by the two supervisors of the arithmetic program for teaching the four fundamental processes.

The joint committee advises that examples be written in line formation rather than in column formation and that signs of operation be omitted.

Addition

With regard to teaching the basic combinations there is no difference in our methods and those employed by schools for the seeing.

In adding groups of numbers of two digits or more than two digits, the pupil should be trained to begin at the left and work toward the right. For example, in adding 297 and 452, he should add the hundreds first, the tens second and the units last. At first he should be allowed or even encouraged to record partial totals. As soon as he becomes sure of his ground, however, this practice should be abandoned in order to increase his speed. Thus ultimately he should be able to add 348 and 576, for example, in the following manner. While placing the finger on the 5 of 576 he should think of 800. With the finger on the 4 of 48 he should think 840. Then with the finger on the 7 of 76 he should at once think of 910. While reading the 8 of 48 he should think 918. And, finally, while reading the 6 of 76 he should think 924.

When the pupil has become thoroughly competent in addition, he should be encouraged to add a number of dollars and cents directly to another number of dollars and cents, rather than to add dollars first, the tens' column of cents second and the units' column of cents last. He will find this of much practical value in daily life. It will enable him to keep tabs on the corner grocer e.g.

Much practice should be given on the adding of tens as such. For example, a pupil should be made to feel keenly that 90 and 60 are 150—not 9 and 6 plus a zero. The small child should be required to handle objects in groups of ten very frequently in order to assure the building up of the right concept.

Subtraction

In the case of subtraction the pupil should be taught to subtract any basic number from another number by the regular method of taking away. Thus, since

he learns in addition that 3 and 9 are 12, he should come to know that 9 from 12 is 3 and that 9 from 82 is 73 for example.

For all numbers over 10, however, he should be taught to subtract by the additive method—the method of building up. For example, if he wishes to take 257 from 812, he should first build up from 257 to 757, next he should build to 800, and lastly add on the amount over 800. In order for the pupil to subtract speedily by the additive method, the difference between any given number and 100 should become as automatic to him as do the basic combinations. That is, if the teacher says, "27," for example, the number 73 should at once flash through the mind of the pupil.

In subtracting tens from even tens, the pupil should learn to bridge the hundreds automatically. That is, in taking 60 from 130, for example, he should not build up to 100 first and then add on the amount over 100. He should recognize immediately that 60 and 70 are 130. This same procedure should be followed when the pupil takes even tens from tens and units.

In dealing with money, the pupil should be taught the regular method of counting back the change in addition to subtracting one amount from another by the additive method.

Multiplication

Multiplication examples should be done from left to right rather than from right to left. In multiplying 367 by 89, for example, the pupil should compute 80 times 367 first. If he is able to do so, he should remember rather than write the partial product while computing 9 times 367. In accordance with what has been said above with regard to working with tens as such, some teachers feel that in multiplying 367 by 89, the pupil should first find 10 times 367, and then take 8 times that result. Others feel, however, that by the time a pupil learns to multiply, it will do him no harm to take 8 times 367 and then add a zero. The second method seems to us both faster and easier.

Division

With regard to division it need only be said that methods used in schools for the seeing are followed, although the multiplication and subtraction involved are done in accordance with the special methods which have been explained above.

TENDENCIES WHICH CREATE UNNECESSARY PROBLEMS IN THE EDUCATION OF THE BLIND

M. FLORENTIN
Venezuelan Institute for the Blind

Numerous unsolved technical problems still stand in the way of the normal development of the process of educating the blind, and these problems should be thoroughly understood and eliminated before reaching a desired level of efficiency.

One of the significant obstacles to the solution of the referred problems is the dangerous existent tendency of some of our schools to give the blind the same education as that given to the sighted.

Indeed, the main purpose of every School for the Blind is to achieve the complete habilitation of its trainees; and this cannot be accomplished except gradually through the use of special teachings, methods, and techniques.

In the interest of the blind children it

is necessary that their schooling be organized on a basis tightly adjusted to their most immediate needs, as well as to their future.

Another tendency which creates an even more serious problem for the sightless child finds an easier rooting in some small towns, where the good leading citizens, possessed perhaps with a commendable generosity, but lacking the necessary understanding of the problems of the blind, insist and recommend that the blind children be received in public schools along with other children. It is obvious that those citizens are far from being acquainted with the profound and complicated process of social and psychological transformation that is present in the child in these times, and in which the specialized teacher must be on the alert, observing and conducting the development of the child's personality in order to help him become a useful member of society.

The supporters of the idea expressed above, having an over-simplified concept of the blind children's education, think that any public school teacher, after a brief and superficial training in Braille's system, are entitled to take care of the Blind's Education. Surely, they must believe that it is sufficient to teach the sightless child to read and write, and subjects like mathematics, geography, history, etc. No doubt, all this leads not to "habilitation" of the blind child. To him, it is of main importance to teach him NOT TO BE BLIND, and behave accordingly. To insist in sending the blind boy or girl to a public school is to offer them a completely superficial and inadequate education.

The process of teaching the child NOT TO BE BLIND is not easy at all, nor can it be developed by improvised teachers. This type of education encloses difficult subjects, such as the adaptation of the senses, orientation, development of the memory, etc. Even before the mentioned subjects, comes the training of the child in the necessary physical skill and behavior; that is, walking properly, erect posture, correction of nervous ticks, riddance of habits as that of rubbing his eyes with his hands, grabbing other people while talking, etc. Also, there are other types of behavior to be taught; these are: to eat and dress properly, to bathe, to comb his hair, to be self sufficient—NOT TO BE BLIND.

As we can understand, no common elementary school is prepared for teachings of the nature referred above. And I do not believe I exaggerate in saying that when the time comes for blind children to leave public school, they will be considered as a hindrance to society.

No less significant is the study by the blind child of his native language in the public school which constitutes a fundamental base in his future intellectual development.

It is especially difficult for the blind student to enrich his intelligence with ideas expressed by words of an abstract meaning for him. It must not be forgotten that language, in its major part, consists of words which represent visual images. In the public school, the blind child might learn those words in the correct pronunciation and spelling, but actually that will reflect upon his intellect in an incoherent and unreal manner.

Consequently, the study of Lexicology takes, or should take, a primordial place in the primary education given to the sightless child. And this job can be confided only to specialized teachers with a good deal of experience in handling such problems. Such teachers know the natural inclination of many blind children, who, not being capable to understand the meaning of numerous visual images, tend to absorb themselves around fantastic and unreal images, artificially created by them,

and all this contributes to handicap his normal spiritual and intellectual developments. The specialized teacher corrects those inclinations and by means of tangible objects, modelings, drawings and sound oral comparisons helps to dissipate confusion and enriches the knowledge of his pupils with clear, precise ideas and concepts. They must teach the blind child, not only to concrete uses of the language, but what is of most importance for his future intellectual development: PRECISION, CONDUCING TO RECTITUDE OF JUDGMENT.

Smaller Schools for the Blind

Surely, the existence of small schools for the blind is necessary in small towns. There are many blind children in small towns whose families do not advocate the idea of specialized training for the blind children or regard it as necessary, or because of the belief that the children need more of their care and love than a so-called education. This reveals that the children's interest is not well understood by his parents, thus making extremely difficult the professional and educational preparation of the child. Two obvious reasons for the pointed drawbacks are the small size school population and the lack of needed material to work with.

Within the large schools themselves, one of the principal problems is the formation or setting up of homogenous groups or classes, especially the preparatory classes due to the natural disparity of capacity of the trainees; there are also differences originated in the several types of blindness and in particular, differences rising in the ages of the students. Nevertheless, large schools can overcome those differences because of their great source of working materials, and also by simply taking measures like grouping students by their ages, capacities, ability to react, etc.

In small schools, where the students do not exceed 20 or 30 in number, it is practically impossible to make such convenient segregation as suggested above. Teachers and students both waste considerable time and energy and we must not forget that time is truly important in the education of the blind individual whose intellectual and professional preparations are necessarily slower than those of the sighted individual.

Many small schools, due to their lack of resources, do not have adequate material, and the number of teachers, small as it has to be, must multiply their activities. This naturally results in a deficient training of the students.

The existence of so many small schools, where blind children are only half-trained, reveals that the true interest of his education has not been understood everywhere; it also reveals that there is a permanent disagreement about the methods to be followed, and this disagreement should be done away with by setting up large schools in State or provincial capitals or at least in the principal cities of the most populated centers.

I believe I have stated the problem of sending blind children to regular elementary schools, and that by doing so, we impair their education rather than benefit it. On the contrary, I believe that the student should be sent to an ordinary high school, something which is highly recommended.

I also believe that I have proved that education for the blind, at least elementary education, **must be organized as specialized training.**

For specialized training and for the main achievement of our work, which is that of the Normalization of the Blind and his incorporation to society as a useful element, I PERMIT MYSELF TO ASK THIS HONORABLE CONVENTION OF EMINENT TYPHLOLOGISTS AND EXPERIENCED TEACHERS TO ADOPT THIS IDEA IN THE FORM OF A MOTION.

SOCIAL ADJUSTMENT AMONG STUDENTS OF JUNIOR HIGH SCHOOL AGE

By
RACHEL F. RAWLS, North Carolina

There is probably no group in the school set up, whether it be a public, private, residential, or non-residential school, that requires more patience and more careful handling than the adolescent Junior High School group.

In speaking of this group, I shall use grade six, seven, eight, and nine as junior high school grades. The sixth grade is frequently regarded as a junior high school grade and most of this paper will apply equally well to that grade level.

The ages range from about ten or eleven in public schools to about fourteen or fifteen. In Schools for the Blind, however, we find that the age level is somewhat more advanced. In a preliminary survey of ages in schools for the blind made in 1946, we found that most schools are apparently similar to ours in age level. Our junior high school students range from thirteen to eighteen years. The age differential makes our problem of adjustment somewhat different from that of the public schools, but in general the problem and methods of dealing with it are the same, for even with the age discrepancy, it is obvious that there is a big overlap of children of the same ages in both public schools and schools for the blind.

Social adjustment implies a great deal. It concerns the social life of the student on and off the campus, his participation in group activities, his ability to get along with classmates, cottage mates, people of the opposite sex, his ability to make lasting friendship, and his adjustment to the adults with whom he has to deal in school and at home. We feel that it is necessary to make the child's life happy by means of a good social adjustment, and at the same time, make his prospects for the future better by preparing for future adjustment.

Problems of a public school and a non-residential school do not have the same scope nor intensity as those of a residential school. It is the residential school in which we are interested in this paper. Since the child is present in the residential school by far the greater part of the year for about thirteen years, most of the problem of the student's social adequacy and his adjustment to people in and out of the school devolves on the school. We must prepare him not only to adjust to his fellow students, but to his family and people away from the campus as well.

During the junior high school years, the students usually reach puberty. This can be a rather traumatic experience for the child, and it requires a good deal of patience and understanding counseling to help during this period.

In addition to the obvious physical changes which are taking place, the child faces more subtle changes and emotions. He is experiencing new drives which he does not completely understand nor know how to deal with.

The matron or house mother can be of inestimable value here in explaining the necessary sex hygiene associated with coming physical maturity. She should also be careful to explain the physical changes taking place, stressing their naturalness. The child, of course, should be given proper instruction in the meaning of these changes by trained people, but the matron can help to make clear any problems which arise in connection with them better than any one else. Boys as well as

girls need guidance at this time. There should be a man to whom they feel free to go for this guidance. "Wet-dreams" and such occurrences frequently worry boys a great deal, and they consequently need attention and help.

The school cannot ignore this important part of the child's adjustment, and it has a definite influence on his present and future social adjustment. Since the child is generally housed with boys or girls both a little older and a little younger than himself, it is important that there be adults who can help him and whom he trusts so that he will not feel it necessary to go to other boys or girls for information. If he receives his information in that manner, he will be given half-truths and misinformation or superstitions which will at best keep him from finding out the real factors involved and at worst may frighten him and turn his whole feeling for the opposite sex into abnormal channels.

If the boy or girl has had adequate opportunity to play naturally with members of the opposite sex, the attraction he will begin to feel for them will create less of a problem at this time. The "boy-crazy" or "girl-crazy" student is frequently the one who has had so litttle opportunity to be with friends of both sexes in a play situation that they do not know what to do and say around boys or girls as the case may be. In a school, supervised recreation of boys and girls at the younger age levels should be provided frequently, because this must take the place of the normal play-situation in most home environments where the child has neighbors, brothers, and sisters with him a great deal. Playing together should be accepted as natural. This can merge almost imperceptibly into the more mature activities which the child will become interested in during the junior high school ages. His social adjustment will be a simple and natural process as a consequence.

By the time the child reaches the junior high school, he particularly needs to make an adequate social adjustment to members of the other sex. The patterns of behavior set up here will undoubtedly persist for a number of years, and influence future social adjustment a great deal. Frequent meetings should be arranged with enough constructive planned activity to give them a feeling of ease. Dances, conversational games, picnics, and other activities should be held with the boys and girls doing most of the planning and arranging. They should perhaps meet with a faculty adviser who will help when needed and stay out of the plans when not needed, and they should do most of the work themselves wherever possible. This is an important part of their social adjustment for they must learn to work together in groups, and, although it is frequently easier to do the work ourselves, we owe it to the students to let them have that experience. By having activities to engage in two problems can be avoided. One is the problem children sometimes face of not knowing what to do and say to a "date," and the children of junior high school age usually face this problem quite often. The second is a problem which concerns the teachers and matrons and families more than the children, and that is the tendency to pair off into couples which are inseparable. It is desirable to a certain extent to have couples engage in activities, but if one boy and one girl at this time of their life feel that they can be with no one else happily, they are losing the opportunity to build up habits of talking and acting which will give them poise around all types of people. This process tends to hinder their social adjustment, since they limit their adjustment to one person. Often the two who become inseparable are drawn together by a similar feeling of timidity and reticence toward most people, and they should

be brought more into group activities. This must be done tactfully, however, and they must not get the feeling that they are forced to participate in order to keep them apart.

A special concern to the school should be the children who cannot seem to adjust to their own or the opposite sex. If the child is unpopular an unobtrusive study should be made of the situation to determine the factors which are causing this. Failure to adjust to the group socially may result in several types of behavior problems. The bully is usually a student who cannot feel secure with the group of his own age and consequently tries to achieve superiority by forcing smaller or younger children to do as he tells them. The student who engages in excessive "bragging" and who "shows off" in the classroom is trying to win social approval by the only means he knows. Social rejection may lead to extreme introversion, and this type of student needs very careful guidance because his difficulties are easier than the two previous examples mentioned to overlook. The student's teachers, counselors, and matron should discover the causes of the student's unpopularity with the group, and then set about quietly to correct the things which tend to make others reject him. By encouraging him in the classroom and in campus activities, to take part while not forcing him on the other students, by giving him responsibilitites, and by tactfully leading the other students to cooperate, the student can be given confidence and helped to achieve social approval and acceptance.

Another special problem is the newly blinded student who sometimes enters at this period of school. This child has the physical and emotional changes going on at this time complicated by the necessity of adjusting to visual difficulties. Being away from home, too, makes this period more difficult for him. Fortunately, children usually have great resilience, but we have observed several students whose whole future in the school was complicated with bitterness which was not dealt with at this time. The child must be led patiently to accept his handicap. The bitterness and unhappiness which he feels will, if he is not helped, make him difficult to be around and he will consequently find the group does not like him, which will further complicate his problem. Every effort should be made to place him with congenial roommates and classmates who are willing to help facilitate his adjustment. These companions must be counseled so that they will have an understanding and tolerance for the new student's problems and be willing to help him. This is a difficult period and these steps can determine whether or not the student will continue to stay in school, and whether he will progress normally. They can make the difference between an adequate social adjustment and a social maladjustment which will last for years.

Especial care should be taken with the totally blind students where students with partial vision and totally blind students are in the same school. The student with some vision should not be encouraged to do all the work though it may often be easier. The totally blind student, unless he is an exceptionally poised and independent person, is usually willing to let the others do most of the leading and assume little responsibility. He needs the experience of planning and leading the group in activities also and should be encouraged to do so.

A perfectly natural phenomenon of this group of students is a revolt against authority. Families face this continually among children of this age group, and natrally the school must be prepared to face the same thing. The children must, of course, be subject to the necessary restric-

tions of the group, but these must not be so inexplicable from their viewpoint nor so repressive as to create difficulties in their social adjustment.

We have mentioned previously the fact that children should have ample opportunity to plan and execute their own activities whenever possible. This will, of course, help alleviate the situation. We have found that this is a good point for students to begin to participate in the Student Government, which handles a great many of the student activities in the high school and junior high school. Frequently the influence of a person a few years older and a few years more advanced in school is much more powerful than that of all the adults in the school. By channeling this influence into the student governmental activities, it is possible to use it constructively.

These students are usually quite willing to cooperate with school rules and regulations when the reasons for them are understood, although they may slip into defiance occasionally. The best method of handling these problems is to create a group feeling which will indicate social disapproval when a student misbehaves.

The classroom itself is an important phase of the child's social adjustment. Here is one place in which he must adjust to adults, fellow students of his own sex, and students of the opposite sex. Since these groups are usually fairly small, the teacher can help create a feeling of ease and comfort in which students can work toward a common goal. This is an important area in which the teacher can help. Shy and timid children should be given especial opportunities to participate in class projects, beginnnig with contributions which are simple enough to bring to a successful conclusion. Overconfident or boisterous youngsters can be given a constructive outlet for surplus energies. Children who seem unduly self-conscious with members of the opposite sex should be given a chance to work together on committees or projects.

Equally or more important than the classroom is the cottage life of the child. Here is the place where they study, loaf, play, talk. The matron must supply the mother's place and help the child get along with fellow students in the cottage.

Care should be taken to see that the child is happy in his living arrangements; that the roommates are agreeable to each other; that they are of comparable age and interests. Whenever possible, naturally, the child's own wishes should be consulted.

It is never feasible to interfere with an occasional quarrel or disagreement and usually it is better to remain neutral if it is brought to the attention of a teacher or matron, but where one or two individuals are continually disagreeing, it is advisable to see why. If two personalities clash continually it may be possible to give them a feeling of joint responsibility for some duty in order to help them see the agreeable characteristics of each other. If one child is continually in a disagreement with some one, an effort should be made to determine the underlying cause and help him to see his basic difficulty and conquer it. It may, for example, be a feeling of inferiority which makes him try to get attention and importance by quarreling. If this seems to be the case, it might be possible to give some responsibility which will give him importance in the eyes of his cottage mates and himself and facilitate his adjustment to them. In the dining hall, if it is possible, the seating arrangements should be changed frequently enough so that each student has a chance to be with several groups during the year. Eating should be as pleasant as possible and an atmosphere which will encourage cheerful and friendly conversation should be created.

Counseling and guidance should be

given to help the students understand that living together must, of necessity, involve cooperation between people. Bullying, as we stated previously, is usually a sign of social maladjustment. It reveals itself in the cottage life more frequently than in the classroom, and consequently the matron should be careful to detect any signs of this type of activity and help to adjust the individual to his companions so he will not feel it necessary to spend his time "picking on" smaller or weaker students.

We have not previously mentioned the part of the family in the child's social adjustment. From several angles, this can be an important influence. If the child's home is a poor environment he will need particular attention at this time. Children of this age often feel awkward and hesitant to go into large groups because of their rather sudden physical growth which leaves them with incomplete control of their bodies, consequently they must feel secure in their knowledge of how to act in most situations. To use a simple example, eating can be a real problem to a blind child and particularly one of adolescent years and prevent him from having many pleasant group experiences. Enough effort must be made to teach him good manners so that he will feel secure in company, and if the home back ground is inadequate the sole responsibility rests with the school.

Where the background of the student is socially inadequate and the child is continually faced with emotional stress because of it, he will need help and guidance. He will need a sympathetic person who can listen to his problems and alleviate them by advising him. If nothing has been done previously, it is still not too late to enlist the aid of social service agencies to better the family atmosphere or place the child in a better environment.

Where the family is willing to cooperate to help the adolescent child make a good social adjustment, many of the problems are easily solved together.

The child lives not only in the school but at home as well, and even in school his life is not, or should not be, entirely restricted to the campus. We are preparing the child to live in a world with sighted people primarily, and he must be able to adjust to the people with whom he will live and work later on. The majority of people are not going to adjust to our children, consequently, the adjustment is primarily their responsibility. By helping him make a good social adjustment during adolescence, we prepare him to make one at all times.

Through the church, public schools, and any other organization which will cooperate, such as Scouts, as many opportunities as possible must be provided for contacts outside the school, particularly with children of the same age. The student will be more at ease as he has increasing opportunities to be with people. Having some special skill such as the ability to play a musical instrument or swim well is desirable, but, of course, not always possible.

It remains apparent, however, that we who teach in schools for the blind, have a great responsibility outside of teaching subject matter, and that the work we do with children at this period can mean the difference between maladjustment and adjustment in their social life in school, at home, and in the community at large. We may frequently have to do things which may seem almost unethical in listening to complaints about other students or teachers, for example, but we must remember that the child has no other outlet for these feelings since his family is not here to listen. A great deal more responsibility falls on the teacher in a residential school than in a public school

to help the child to an adequate social adjustment.

Many of the points of this paper apply equally well to adolescents whether or not they are blind. The children with whom we are dealing face the same problems as all other children, but their intensity is frequently greater because of the additional handicap. Students of this age are both interesting and stimulating to deal with and the help we give them at this period may mean the difference between future success and failure, happiness and unhappiness.

WHAT ARE THE MOST RETARDING FACTORS IN LEARNING SEVENTH AND EIGHTH GRADE ARITHMETIC?

By
CHARLES C. RIDDLE, Missouri

The words "seventh and eighth grades" in the above title are practically useless, for the reason that most such factors have their beginning in grades below the seventh and eighth. To confine their discussion to these grades would be to set a limitation as would render discussion meaningless. Therefore, let us begin with each factor where it first appears, and follow it to the results it produces.

The first factor chosen is that pupils lack number concepts. This is such a simple statement, that it may appear equally insignificant. But what does such a statement mean? In its simplest interpretation, it means that many children have an insufficient, or lack entirely, a true mental comprehension of what number, magnitude, quantity really is. I use the singular verb intentionally, because these are merely three different names for the same thing. Many a child's first attempt to count is a rapid-fire repetition of the numbers from one to one hundred in perfect parrot fashion, with no idea whatsoever that actual counting is being done. The activity is a mere meaningless repetition of sounds,—not numbers. No quantity is even thought of; there is a complete absence of rational counting.

Some will no doubt say, "Why does this matter? The child will come into the rational comprehension of numbers as he advances in experience and his need arises." Let that be as it may. For the time being, I am only trying to make clear what I mean by a total absence of number concept.

To prove how appallingly frequent is such a total lack of any meaning of number in the minds of many children, who can "count," as they say, to one hundred or more so glibly, place before individual after individual two groups of any convenient objects of different size, for example 12 beans and 20 beans, and ask which group contains the greater number. In many cases I have had them look in stunned amazement; while the tell-tale blank expression told beyond a doubt that there was present in the mind not the least idea of what the child had actually been doing. Ask them to count the beans in the two groups and then tell you which has the greater number, and you may not be surprised to find them unable to count the beans, even one at a time. Or even if able to count them one at a time, they are sometimes still unable to say whether 12 or 20 is the greater number.

The argument here is not whether the number of children with such utter lack of number concept is large; the fact that

is undebatable and cannot be denied, is that as long as any child has such utter lack of a sense of number, he cannot make any progress in arithmetic.

It is understood that this condition is at the very beginning of number work. It may be said the children at this stage may be expected to have a very limited idea of number, and that they will naturally acquire an adequate concept as they proceed. This may be true provided that suitable materials are provided and proper methods are used; but the fact that so many children are almost devoid of any adequate concept would indicate that in hundreds of cases suitable materials are not used nor correct methods pursued.

It is too often assumed that just any kind of dealing with numbers will impart a clear concept of them. This is by no means true, as endless trouble with arithmetic in the upper grades so abundantly testifies.

Neglecting this concept in the early stages of number and taking it for granted is only the first big mistake in beginning number work. The next and even bigger still comes when addition combinations are taken up. It has been the avowed aim in Missouri with many teachers for the past 25 or 30 years to make automatic the recognition of practically all the ordinary addition number combinations. That is to say, when the child sees "5 plus 3," he is to answer immediately "8," "9 plus 7," 16, and so on. Results, to all appearances, were quite gratifying, and I was as enthusiastic as the rest. But we had a big surprise awaiting us. When these same children reached the upper grades, it became evident that they had learned the various number combinations as perfect automatons; that their mental processes had been purely mechanical. In the combination "3 plus 5" equals 8, for example, "3" had not meant a number but a sound. So also for "5" and "8." They were mere sounds that were supposed always to go together. "8" did not mean 8 anything. Neither did 3 or 5. There was a mental association, to be sure, but it had not been of number. There was no more concept of number, of about so many, or that a certain number of units together with a certain other number of units made a total amount of 8 units, than there would have been in naming any three articles associated in thought, but without respect to number. If we write down the words "trap," "cheese," "mouse," there is a certain amount of association, but not of number. We could soon teach a class always to name the third one of these objects whenever we named the other two, but this would not be number. It would be only an association in thought with entire disregard of number.

This "parrotization" of number combinations appeared to have worked wonders with the children so long as the only requirement was to find the answers to long columns of figures in addition; but we were struck with dismay when we first called for the solution of the simplest "thought" problems. We would set forth a simple problem and expect its solution to be forthcoming with ease and felicity. But, to our surprise, the child's face was a picture of blank puzzlement. We could not believe our own eyes. We wondered what could be the matter. We restated the problem. We asked simple questions. But still no result. We wondered if the child was just plain dumb about numbers, or whether we had some special mental defect that was responsible for his apparent backwardness. But we tried pupil after pupil, and all seemed much the same. Our bewilderment was without bounds, but when we found the real cause of the difficulty, we were surprised that it should not have been ob-

vious from the beginning, had we only suspected the after effect of automatizing the number combinations without involving any number concept of any of them.

The better teachers soon recognized the absence of number concept and got very busy. They got together quantities of many kinds of familiar objects, such as beans, grains of corn, marbles, and many others. They put the pupils to work with such things, at activities that provoked a consideration of them as numbers. Let's build a log cabin out of cobs, (or splints, if you are urban), and count up how many we will have to have. How many walls will the cabin have? Ans.: At least four. How many "logs" high will we make it? Ans.: Ten logs high. Bring enough cobs (or splints) to build it. And so, all the time, counting, estimating, getting a concept of number. But once the damage is done, it may take months to get the idea of number to dawn.

The big damage has been done, and they find that after months of teaching by mere rote, it seems all but impossible ever to eradicate the barrier of the wrong mental slant. Hindrances to learning can be just as indelibly inscribed on the mind as can truth and accuracy.

I must hasten to admit that I have cited extreme cases; but I have seen whole classes, and many of them, whose mental concept of number was so little better than what I have cited as to be negligible.

No doubt we have all deplored at some time or other some pupil counting on his fingers. Rightly so? Yes, for this habit is easy to become fixed, and it is too slow for permanent use. However, it should open our eyes to one important truth, namely, that when children really add, they operate on the basis of number concept. Such kind of adding is at least a reality; not a parrot like response. I have seen whole classes of pupils peck out the addition of long columns of figures on the black board, with pieces of crayon. Such a habit is to be avoided, but it proves again that computation demands a concept of number.

Moreover, we must not be deceived by thinking that the concept of number will necessarily be present in the solution of simple problems. It is quite easy for children to learn to find the answers to simple problems purely by pattern. In the problem, "If one pencil costs 3¢, what will 5 pencils cost?", it is surprising how quickly the mind of a child will skip over the reasoning of the problem and hit upon the answer without any thought process whatsoever. He can soon acquire the habit of associating "5" and "3" with "15" purely by pattern. He may even give you the correct answer to dozens of problems similar to this one and be wholly unaware of any rational process whatsoever. That is to say, he may not think, "If one pencil costs 3¢, 5 pencils will cost 5 times 3¢, which is 15¢." He may never see at all that the price of one pencil must be paid every time he buys a pencil, and that, therefore, to buy 5 pencils, it must be paid 5 times. It will be argued that he should not go through such mental analysis; that it is too slow; and that we adults do not go through any such mental analysis. True enough as far as your argument goes; but unless the child does at **some** time come into such a mastery of the rational process involved in such simple problems, his arithmetic will become increasingly difficult for him the farther he proceeds.

"But," you may insist, "how is the child to get the necessary concepts you insist he must have?" To develop a method and show illustrative material in detail is beyond the possible scope of any paper; but a few general principles may be mentioned. Children should be given opportunity to count many, many objects

in which they are interested. I mean, interested more in counting the objects than in the objects themselves. The counting should preferably be for some purpose; but not always. Some bare abstract counting has its uses. Let the counting be always in a perfectly natural way. Let it be both with and without objects. Do not force the child into meaningless rapidity. Let him alone—at least part of the time. Let him advance in his number work only so fast as to aply his number concept to needed counting or computation. He has plenty of time.

To conceive number is one of the child's most natural tendencies—I wanted to say "instincts," but that would be unsafe phychology. He is, in his tenderest years, interested in, "how much?" "how many?" "is so many enough?" and so on, more and more, as his experience increases and his concept grows. Most children love to count, provided of course, that they are really and truly counting. Children will patiently and laboriously count up long columns of digits, provided they are allowed to do it in a rational way. Just a moment, now, before you object that by such a procedure most children would never add except at a snail's pace. But here is where the teacher comes in. Just as a child creeps before he walks, but does not creep all his life; and just as he walks before he runs, but does not walk on all occasions, just so does a child add one at a time at first but does not add one at a time all his life. It is as natural for a child to desire more speed in computation as he advances in number knowledge as it is for him to desire more speed on his feet as the need arises. Much practice in counting, both with and without objects, (and counting is nothing more nor less than adding) has given rise to a natural and continuous increase in speed. We must warn at this point that counting as used in this paper is not just 1, 2, 3, 4, 5, and so on up to 100 and then repeat. This may be the first step, but soon we begin with 1 and add 2 each time, as 1, 3, 5, 7, etc. But before this becomes too automatic, change it to begin with 1 and add 3 at a time, then with 2 and add 3 at a time. This absolutely prevents automatization and keeps the pupil applying his concept of number. Here again I should like to go into detail of how the whole idea set forth in this paper works out, but space forbids. Nothing short of an arithmetic text book could tell the story adequately. But these are the child's first steps in developing his concept of number. Every time he counts, or adds, he conceives number, quantity, amount. Number is something real. It has a real meaning in his experience every day and every time number enters into his experience or his need.

Improbable as it may seem, many children see nothing natural or rational in the process of subtraction. It is too often a pitiful mechanical process in which the child sees nothing but a way to get an "answer." The question is often asked, "What method is best to use for subtraction?" It is not so much the method we use, as it is that we make the process a sensible one. What are we trying to do in subtraction anyway? We are simply trying to take a certain amount away from a given number, and see what is left. What is our first difficulty? It is usually the fact that we reach the subject of subtraction without the pupil's having the faintest idea of the meaning of our Arabic system of notation; or our decimal system of expressing numbers, if you like that better. Most of our children arrive at subtraction without the faintest conception of how we actually represent numbers by the use of but ten characters They have no idea whatever of the place value of digits; or how we really count in groups, or bundles. Children should

have some such picture of our decimal system as would be shown by a number, say 257, represented by two bundles of one hundred splints each, five bundles of ten splints each, and one bundle of seven single splints. The two bundles of one hundred each should be laid at the left in hundred's true place, the tens to the right of the hundreds, and the seven units in units place at the right. Dozens of numbers should be so represented and explained—and long before the subject of subtraction is reached, children should be given abundant practice in so representing and explaining numbers. That would emphasize the meaning of "place value of digits" and clear the way for subtraction.

Before proceeding further, let's say again what subtraction is. It is taking one number away from another and seeing how many are left. Our job in subtraction, then, is to get so many away from a given number. How is the simplest way to do this? Using our same number as above, we wish to take 149 from it (here we need a black board). 257 minus 149 equals what? That is our first introduction, we will say, to the process of subtraction as such. My first job is to get 9 units from 257. I have 7 units right before my eyes—doesn't common sense prompt me to take that many away, without any make-to-do about it? I now see that I must take two more away, so I pick up one of my tens, take two away from it and write down in my answer the 8 that is left. I am still to take 4 tens away. I have used one of my 5 tens, and so have only 4 tens left in my "minuend", we will now call it for convenience. Four tens from 4 tens leaves no tens. I indicate this by a zero in my answer. My "subtrahend," as we will now call it for convenience, shows that I am to take one of the hundreds of my minuend away, leaving 1 hundred. I write this in my answer and the problem is complete. Note that by this method there is no "borrowing" nor "paying back"; and that the pupil never has to subtract from a number larger than 10. This eliminates the more difficult part of all the subtraction combinations. It also makes the process a rational one at all times.

Other methods of subtraction would not be bad if we did not deliberately introduce meaningless piffle into them. Often children are told, when the figure in the minuend is larger than that of the subtrahend, to write a "1" to the left of the figure in the minuend and subtract from the number so made. **Why** such procedure, is not suggested. The child soon learns to take it "on faith," and a good big step has been taken toward getting him to take everything else "on faith." He learns to question nothing—to learn nothing. By such procedures the whole subject of arithmetic soon becomes a jumble of inane, meaningless piffle.

The method of subtraction is brand new and will come awkward to us who have used the old methods for a life time; but to children, it is quite as natural, and even more so than the older methods. A few of its advantages have been indicated, but repetition at this point may be justifiable. It constantly emphasizes exactly **what is being done.** The child sees at every step that he is actually taking the lower number from the upper. Or in arithmetical language, he is taking the subtrahend from the minuend. He is actually getting all of the lower number away from the upper.

All this discussion from the simplest counting to and including addition and subtraction has been mainly for the purpose of making clear what is meant by the number concept, and how essential it is to any progress whatsoever in arithmetic. Multiplication can also be shown to be capable of rationalization, and that it is of immense importance to develop a real

and true concept of each of them as a process. But space forbids further dealing with the number concept. Suffice it to say that it is hoped that the meaning of this first and most gigantic stumbling block in the way of arithmetical progress has been made plain, and that the frequency of it has been verified.

In attempting to discuss several of the retarding factors to arithmetic progress, I have not attempted to present them in their order of importance, but rather in their natural sequence from the lower to the higher grades.

The next factor so appearing is the mixing of the four fundamental processes too soon. Why we insist in doing all things at once merely because they are relatively simple, I cannot comprehend. Multiplication is only a special case of addition; but it cannot be explained as such until the true nature of addition has become a simple, rational matter to the pupil. Let me illustrate. Suppose we have this simple problem: a merchant bought 5 suits of clothes at $32.50 per suit. How much did they cost him? If a child understands addition, he can, and probably will, solve this problem at once. He will write down $32.50 five times and add them together. Let him do so if he likes; and give him several others and let him solve them in the same natural way. Now point out to him that he has a row of zeroes, a row of 5's, a row of 2's, and a row of 3's, in the first problem; and so for all the others, he has rows of figures just alike. Therefore, instead of adding the like figures one at a time, it will save time if he thinks, five times zero is zero; five times 5 are twenty-five, and so on for all the other figures of the problem. Thus multiplication takes on quite naturally the rationalization of addition. So multiplication becomes the process of taking a number so many **times**. This gives an early opportunity to stress the fact that our multiplier must always be an abstract number (or to the children, a number that has no name after it). Show how nonsensical it would be to ask you to tell me your name 3 apples times. Also it cannot be too strongly emphasized, nor emphasized too early, that whatever you take, you will get. You cannot take tons of hay and have horses. To a class in the habit of seeing sense in what they do this suggested absurdity will bring peals of laughter. To the class without a concept of **anything** they do, you can put over on them any sort of nonsense and they will accept it without a smile.

If the multiplication tables are not yet learned, this is an excellent place to begin learning them, for from now on they will be needed almost every day. If the pupils have been doing the proper amount and variety of counting, as has been described, learning the tables will be a simple matter. They will already have learned to count readily by all the digits up to and including 9 with easy readiness. All that remains to do to learn the tables is to note at each step of counting how many of the various digits it takes to make the various multiples. The number concept will do excellent service at this point.

By the use of several simple problems in division, which the pupil will readily solve by subtraction, the transition from subtraction to division may be made just as we did from addition to multiplication. The two processes are so closely allied that the one aids and supplements the other instead of adding new difficulties, as is usually the case when we begin division. But if we dabble with one fundamental process for a while, then, because we think a problem from another process can as well be solved as not because it is simple, introduce such a problem, we mess up matters inexcusably, and do much detriment to rational growth. Don't get so anxious to cover pages. If

your class is growing a little each day, real growth, I mean, not merely memorizing a few more patterns, be content to give them a chance.

Our conclusion is, therefore, that there is in the first place, no need whatever for mixing the four fundamental processes; at least in the solution of problems, until each process as taken up has become a rational and meaningful procedure—until the pupil **knows**, comprehends fully, what he is doing. In the second place, there is nothing to be gained by scrambling the processes, and there is great danger of producing confusion and final defeat. Of course if the whole procedure from the first has been to each child a confused mess, it makes little difference how we proceed. One entanglement is about as bad as another.

The next retarding factor follows almost as a corollary to what has already been said. Usually a child reaches the subject of fractions with no adequate idea of the four fundamental processes, or a real number concept. How can we teach the subject of fractions if the conception of whole numbers is hazy, vague, and all but meaningless? There are but a few basic ideas in fractions, but they must be comprehended or fractions are nothing but an exasperating jumble of figures variously arranged.

In the first place pupils must realize where fractions come from. The meaning and function of numerator and denominator must be made a reality. It is unbelievable how utterly unreal these two parts of a fraction can be. I have asked pupils in eighth grade classes, "Which is the greater, 17/23 of a pie or 17/35 of a pie?" and have not infrequently received the reply that 17/35 is the greater. Do you see where such an answer comes from? The two 17's are the same size; but 35 is bigger than 23, so 17/35 must be the greater amount. Such an answer gives us an opening. We ask, "What does the denominator of a fraction show?" In an average class I will be agreeably surprised if more than 25% know what it shows. **Now** here is where deficiencies of earlier grades come in for heavy toll. If I could simply say, "The denominator shows into how many pieces our unit is divided," and bring back a clear idea the class had once possessed, it would be a simple matter. But in most cases I must work like fury for hours, or even days, to arouse that simplest idea that the denominator shows into how many parts we divided our unit, and that therefore, the more pieces we cut a pie into, the smaller they get; **and** that therefore 17/35 must be less than 17/23. A question like this may provoke a lucid interval: "Hazel (this to the pupil who said 17/35 is the larger), do you know what you told me when you said 17/35 is greater than 17/23? You told me that the more pieces you cut a pie into, the bigger the pieces got. How astonished you would be if such a thing really happened!"

Never introduce fractions by using anything but whole units for your division into parts. Let fractional parts of whole numbers come later. Use pies, apples, cookies, and everything you can find that may be conveniently divided into approximately equal parts. Spur your class into the significance of the denominator by showing them that you first cut the pie into 8 equal parts, and that **then** you name them eighths, because there **are** eight parts. Then sell some pupil a pie, or play like you do, and try to trick him by delivering only 7, or maybe only 6 pieces. See if he will "call your hand." If he doesn't, kid him good naturedly, but plenty. The next pupil will probably be wider awake. Get it **burned** into the minds of your class that the denominator shows into how many pieces a unit has been divided. Keep the real meaning of the

denominator constantly before the class by giving such exercises as will require a true concept of its meaning. Do a lot of rational playing with the numerator and denominator of a fraction. Get the children to see their true meaning. Even give your class a few good laughs by committing a few absurdities with these essential parts of a fraction. A class must be made numerator and denominator conscious before you can hope to teach fractions as a meaningful procedure.

The veriest dunce would know that the more pieces you cut anything into the smaller the pieces will be; but sometimes it seems simply impossible to get such knowledge to function in the arithmetic class. The true cause is to be found, not in the natural dumbness of the pupils, but in the fact that from the beginning and all the way up, their minds have not only **not** functioned but they have formed the **habit** of not functioning. We find the cause in the lack of any actual growth in number realization throughout the entire course in arithmetic. Either the rational functioning of the mind has a constant growth from the start, or it ceases to grow at all. Eventually what would have been a delightful appreciation of number and its relationships, becomes a dreary mess of confusion and frustration.

The next retarding factor has no particular place in a grade or grades. It can and does appear anywhere and everywhere—mostly everywhere. This retarding factor is meaningless drill. Most text books have too little drill and too much drill at the same time. They have too little of the right kind and too much of the wrong kind. What is the wrong kind of drill? We all know that any mental operation repeated over and over in the same identical manner finally reaches a point where learning ceases. Therefore, drill that does not make frequent interruptions in one's attention, and I want to say, in one's stream of consciousness, is the wrong kind of drill. I'm sure we will all agree that a list of 50 problems, all with precisely the same solution, will have lost its educative value long before the child has solved the last one of the list. On the other hand, exact repetition does have its value within certain limits. But repetition must contain a varied performance toward the same end. It is a very simple matter to vary a drill, if all one does is to vary it. But to vary drill so that it requires, what we might call an up-set of attention now and then, but drives, nevertheless, at the development and fixation of the same principle, requires real art in its construction. Of all exasperations, the worst is to have a few problems on a page for the exposition of some definite principle, and have the author suddenly branch off on some entirely different principle, for the sole purpose of variety in drill. Drill, to be useful, must do more than just repeat the same idea, or process over and over. So I repeat that we often have too much drill of the wrong kind and too little of the right kind.

Much criticism has been voiced in the past about unsatisfactory drill material, and a few writers of text books have put their ears to the ground and decided they would change that situation, **that they would.** How have they gone about it? The following manner is typical: your class will be going along the even tenor of their way, when all at once you turn the page, and there spread in hopeless confusion are two or three problems from each of five or six different subjects or processes, chosen from maybe two or three years of past work. Your first thought is, "Well, here are several processes that might need a review, so I'll assign them for that purpose. You assign the whole page the first time you've tried them. But you find that in most cases any one process would have been quite

enough for one lesson, for often the class seems to know no more about them than if they had never seen them before. You see that a thorough review is needed. So you turn to the index or table of contents, but look in vain for a good straight forward presentation of the subject or principle of the conglomeration of the subject matter spread on the page. Next you leaf through the text, page by page, but find no forthright presentation of any of the principles involved. You close the book in disgust and wish you had its authors present so that you could cram their book down their throats.

This last discussion has presented and almost covered another retarding factor, namely, that authors of text books often disregard the simple fact of learning, that children must attempt but a few things at a time, and that such things must be presented with such natural sequence that a constant shifting of viewpoint is avoided. We often find so many confusing changes in the necessary mental picture that we wonder if the author did not pass into a coma and keep right on writing.

Another retardation comes from what space forbids us to discuss in detail, and indeed not much discussion is necessary. We all know already what these factors are. I say factors for they are a sort of miscellaneous group. We find that children almost never know or use the vocabulary of the subject. The only remedy here is evidently to teach such vocabulary. We have lost the art of teaching vocabulary because it has become a well practiced illusion that children never learn the meaning of words from definitions, but from the reading context only. This is not true. Both are not only needed, but **must be had**. After a child has by context acquired a working definition of a word, there is nothing more needed than a good, clear, accurate, and clear-cut definition to help him get the meaning more exact. So many of our pretended definitions of today are so shambly, and halfhearted that the author seems to be apologizing for having given one at all.

Another member of this same group of factors is verbal absurdities. We allow children to say, or even teach them to say, "divide the divisor into the dividend." What an idiotic expression! The excuse is that "into" here has a special meaning. It means to "lay along on" or "apply to," etc. Even if we grant such a meaning, the practice is no less idiotic than before. Why tax a child with a special meaning of a simple every day word, when the special twisting around required to make it mean anything is going to make his picture of the division process a perfect black-out? That's exactly what it does.

Another of this group is to tell the child when he is in multiplication that his multiplier must be an abstract number, and then when he comes to square measure, teach him that inches multiplied by inches gives square inches. It is no lesss silly to tell a child he can multiply by oranges than it is to tell him he can multiply inches by inches. The excuse here is that it doesn't make any difference so long as the child can get the "right answer." But the only place in which it makes no difference is in the class where the pupils are not learning anything anyway.

One more member of this same group is the false equation. The class is in reduction of a mixed number to an improper fraction. For example: Reduce 5⅞ to eighths. The following is a good example of the false equation and its retarding influence will speak for itself in time, if you are too perverse to see it ahead of time.

5 × 8 equals 40 plus 7 equals 47/8. This not only allows lack of thinking, it invites it. Our methods should stimulate thought, not paralyze it.

Another factor is considered so small

by many teachers that they ignore it altogether, but its effect is serious. Pupils get into the habit of giving all answers in single words, or broken and disjointed phrases. This is another factor that appears unimportant to the uninitiated, but ranks high in those matters that cause thought to converge toward a vanishing point, and should be fought religiously.

This paper is becoming of unwieldly length, so I must hasten to a conclusion. Last but not least among the many retarding factors in learning arithmetic is the text books. In the first place, too many companies are publishing text books. It even seems that in an effort to have the books of each company different from the rest, a direct and simple presentation of a subject is often distorted from its own merits. Straightway, direct, and concise presentation of any subject is becoming more and more a rarity. Naturally a publishing company places first the possibility of how well a book will sell, and it seems to get a best seller they watch the so called educational trends. This is a great age for educational trends. We are always trending somewhere whether we ever get there or not. These unfinished trends have robbed academic education of much of its real value. First there was a trend away from academic education, as being a thing for the small per cent who might go to college. This took much of arithmetic out of the arithmetic text book. Next there was a trend away from what was poorly termed formal education. This made text book writers and publishers deathly afraid of anything that was not outstandingly informal. That is, a definite subject, or area of a subject, must not be selected and set forth with either logical or psychological procedure. To be sure that formality was avoided, authors chose a superficial dribble of this and a dabble of that and strewed it around promiscuously over many pages to make sure that formality was avoided. This was positively necessary, or a text would not get a publisher. Teachers in the field complained at this namby-pamby procedure, but what could they do? All publishers were, and still are, seeking this sort of books.

It seems to me a rather severe indictment of our text books, when there are hundreds of citizens in the country today who would be only too glad to brush up on the information schools are supposed to supply, and also to educate themselves in just exactly the subject matter the schools are suposed to cover; but put up at auction a truck load of present day school books and give buyers pick and choice, and the books will not bring five cents a copy.

To stimulate more sales, it has become the fashion of late to give catchy names to arithmetics; and we have "business" arithmetic; "practical" arithmetic; arithmetic "for the business man," and so on. The intended impression, I presume, is that all different classes will suppose that there is a limited area of arithmetic useful to them only, and that all the rest may be disregarded. This is a definite retardation to arithmetic learning in general; for such books decidedly dilute the principles of arithmetic and emphasize the terms, customs, practices and so forth, of the various occupations they presume to cover.

In concluding this paper, one thing more must be said. Given a bright enough group of pupils, they will appear to repudiate this entire paper; for they will learn in spite of all such retarding factors. On the other hand, given a dull enough group, they will seem to prove this discussion vain; for they would not learn much arithmetic by any methods or materials. But in between there is a large average group that can profit immensely by a due regard for these retarding factors, and they are entitled to the chance. To have the best is their birthright.

TWO PERIODS A DAY AND WHAT CAME OF IT

NANCY LINDEN SMITH, Texas

Feeling a keen responsibility as teacher of reading in the sixth, seventh and eighth grades, I found myself seeking ways and means for improving the reading habits of my pupils. One study was the report of the survey made in the Omaha Public Schools, and some of those findings are embodied in this paper. Other remarks are drawn from years of personal experience in directing study habits of pupils in their reading exercises.

Learning to read is a basic and continuing process which extends through the elementary and high school grades and even into adult life. Reading is the foundation for the comprehension of all other school subjects. A pupil should be able to read at various grade levels, in arithmetic, history, geography, etc., with an adequate comprehension of the vocabulary peculiar to those several fields.

Pupils in our schools for the blind are advancing, or are being advanced, from lower to intermediate levels without acquiring sufficient facility to meet the demands of the reading program. Teachers in our school have a fourfold area of responsibility in the matter of teaching reading: (1) the responsibility to the schools, (2) responsibility to the class room, (3) responsibility to the individual child and, (4) responsibility to himself.

In the first area, that of the schools, there exists a standard, or goal, to which all schools strive to attain and which standard should satisfy the requirements for each grade level. But, in our schools we have a serious handicap in the matter of age-grade placement. For example, two pupils who are in the same grade, aged twelve and seventeen respectively, have different age interests and cannot be expected to develop reading ability through the medium of the same reading material.

The relation between reading ability and socio-economic levels must be provided for, since that factor plays a large part in the lives and scholastic ambitions of our pupils. This does not mean that pupils from high socio-economic levels are all good readers, for we find many of low socio-economic levels who read well. However, the schools feel this factor in effect as it is reflected in the pupils' progress in reading. Then we have the comparison between girls and boys. No convincing proof that girls are generally better readers than boys has been offered, but my experience and observation has so impressed me.

Considering our responsibility to the class room, I have found no better method than that furnished in the pamphlet magazines, or weeklies, published by the Education Press at Columbus, Ohio. In these magazines we have timely information, varied interests, and considerate vocabulary observance. I use them at least twice a week in daily recitations, and my reading exams follow their outline of requirement in (1) total comprehension, (2) word comprehension, (3) sentence compresension and, (4) paragraph comprehension.

Achievement in the third area of responsibility must be evaluated in terms of the pupil's potential ability to learn We are prone to assume that all pupils of a grade have approximately the same interest in, and make comparable effort to achieve, reading success; but this assumption is admittedly untenable in many cases. Mental age seems to be the best known index of the pupil's ability to learn. It is undesirable to attempt to bring a child's reading ability to the standard

of some exceptionally good reader in the group. If he fairly meets the median set for class achievement, he should not be pressed to the extent of making his reading a dreaded chore.

Reading success is sometimes achieved at the expense of considerable emotional stress and strain on the part of both teachers and pupils, and this brings us to the fourth area of responsibility and to the title of this talk.

On October 1st of last session my program was changed from straight sixth grade teaching to that of departmental work in the teaching of history, geography and reading, in the sixth, seventh and eighth grades. Not having taught history formally for a good many years, I spent my first week sounding out the reading habits and abilities of the upper classes, especially, with thirteen pupils in the seventh grade, and eleven in the eighth. In each class there were eight partially sighted pupils. I was amazed to find that not one of the sixteen pupils pretended to read with his fingers at all, but each had lapsed into the habit of sitting in any distorted position, holding the book at any slant or angle by which he could get sufficient light on the page to effectively reveal the dots.

A stickler for "law and order," I set about trying to correct this condition. A storm of protest arose: they were not blind—they didn't have time to cover the assignment—they thought it was silly-looking to have to read with their fingers, etc. I worried along until patience was exhausted, then gave the ultimatum, at the same time handing out apron shields to those who would not try to read correctly. 'Emotional stress and strain,' did we say? It was rough sledding for a while, and a slow process; but I remained adamant, and soon all but two of the sixteen began to cooperate satisfactorily. A number of them merited special praise in their progress, and soon they were taking a noticeable pride in the reading class. Before long the shields were abolished.

The use of the reading texts was abandoned almost entirely, and I depended on the **CURRENT EVENTS MAGAZINE** for material, requiring no pre-preparation, so that each reading recitation was an exercise in so-called sight reading, grade two Braille. The most common difficulty now was a misprint in the paper. We discussed the news items and coordinated daily radio programs and news comments with the factual knowledge achieved by reading.

I felt I had approached a fair measure of success with those two classes in teaching the mechanics of reading as well as making progress along the lines of comprehension. It was showing up in my history work, too.

One day just three weeks before school closed, I had occasion to pass down the hall during their activity in other classes. Imagine my consternation on looking in to find every mother's son of them reading with their eyes! The same grotesque positions, the same bent shoulders, the same screwing around to get more light on their books!

What had my two periods a day come to? And, what are we going to do about it, teachers?

WHAT CAN WE DO TO IMPROVE OUR SOCIAL STUDIES PROGRAM?

By
HUGH D. JOHNSON, Maryland

We are teaching in an age that demands a live program in social studies. The world is changing more rapidly than it did a few generations ago and it is the duty of the teachers of social studies to keep up with these changes and to see that their pupils do the same. The true purpose of social studies is to aid the individual to meet more effectively situations involving social relationships.

We should stress the contributions of older civilizations to democratic government in order to establish better intercultural relations in our schools. We must remove racial prejudices and show that all races can work together as they did in the Second World War. We are teaching Americans—not Jews, Negroes, Germans, English, etc. We are teaching children of all religions and it is the duty of the social studies class to understand these religions.

We have much material around us that we should use to the best advantage. If we understand how the blind child can secure the knowledge that we are trying to give him, we will provide him with the best tools possible.

The majority of textbooks have turned too far from the factual teaching of social studies and many are really inaccurate. Reports have been made by schools and colleges showing that entering students are ignorant of the most essential facts of history and geography. During the past few years a number of good texts have been printed and these should be in Braille as soon as possible.

We need, for example, a good civics text that will give an accurate picture of our government. We must teach government, local, state, and national, if we expect our students to become better citizens than we.

Most of us realize how much the blind child lacks when we compare the material in the print text with that found in Braille. Pictures and illustrations that are a great help in teaching the sighted, are not included. Something must be substituted for this lack or the blind child will have a difficult time.

Small scale models are one answer to this need. These may be handled in such a way that the pupil may compare the various parts with the whole. When we provide such things one obstacle in our teaching will be overcome.

The latest maps from the American Printing House are in many ways superior to print maps — if they are constantly used. The old papier-mache maps are also of great value if used with thumb tacks and string to show routes, currents, boundary changes, etc.

Classroom clay will turn a common globe into an excellent relief globe. Also, the pupils may use clay to construct their own maps—outline or relief.

Field trips offer an excellent opportunity to teach social studies. Farms, factories, local and state governments, historical places, museums, public utilities, and points of geographical interest are all, or in part, near every school for the blind.

The pupils should be encouraged (or if need be, assigned) to listen to daily news broadcasts and at least one good commentator. The views of such men often make the news more understandable since many of them have had experience in the coun-

tries whose news they may be reporting.

One of the drawbacks in teaching any subject is that a great number of children can't read and spell properly. If a pupil does not understand what he is reading and he can't spell what he wants to write, he will be lost. Teachers of social studies haven't time to teach pupils reading and writing in their classes, so our schools must put more time and effort on these basic tools. A thorough knowledge of phonetics will improve this situation considerably.

In the larger schools it may be possible to separate the pupils who learn quickly from those who are slow to comprehend. In any case, it is better to let each child learn what he can—well—instead of trying to hurry him and have him learn nothing.

It is possible in every school to separate those pupils who are mentally retarded from the rest of the group. Special classes can be provided for these pupils.

These suggestions and others which may come to mind may improve our work as teachers of social studies. If we bring these essentials to the pupils in a way that they enjoy we will create a desire on their part to learn.

THE SENIOR HIGH SCHOOL SECTIONAL MEETING met with Joseph J. Kerr of Overbrook as chairman with approximately 41 present. T. E. Stough of North Carolina began the panel discussion on "Mental Hygiene in the Schools for the Blind." He spoke on mental health from a practical standpoint. D. W. Overbeay of Kansas was the second speaker on this subject.

The discussion period following these two speakers was centered around social relationships of the students. A few of the questions asked and discussed by the group were as follows:

1. Is there a plan by which various pupils are made aware and informed of problems they will meet should marriage occur between them in the future?
2. Is the dating mentioned in the North Carolina School planned by the staff members?
3. How are social contacts made between the School and community?
4. How many hours are scheduled for teachers in the North Carolina plan?

Under the second panel discussion entitled "Guidance Program in the Schools for the Blind" Miss Mae Davidow of Overbrook and Dr. S. M. Whinery of Indiana gave some interesting points concerning our testing program. The discussion period following these two papers dealt mainly with the questions of "Why haven't we developed adequate testing materials" and "What are we going to do about it."

MENTAL HEALTH IN INSTITUTIONS FOR THE BLIND

T. E. STOUGH, North Carolina

I wish I could just lay this paper aside this afternoon and discuss with you the mental health of boys and girls in schools for the blind. I am going to assume that in the main our boys and girls are just about the same from Maine to California, and that what will be good for one school will be good for all of them.

The term "mental hygiene" is a relatively new one. One has to go back just a few years to find the first papers prepared on the subject. Its earliest concept centered around the cure of the mentally diseased. At present, however, interest is directed more to the prevention of the increase of mental ill health and to help-

ing children to so deal with their environment that they may be happier, more contented and relieved of much mental distress and disturbances. Since in most cases the mental ills of adulthood have their roots in childhood and since the mental ill health, as a rule, does not develop suddenly, it would seem to be imperative that we do something, the best we know at least, to recognize the symptoms and deal with them intelligently. I should like to be just as practical as possible in discussing the subject. I should like to bring it to the understanding of all who have to do with institutionalized children.

> "In its broadest sense mental health has come to mean the measure of a person's ability to shape his environment, to adjust to life as he has to face it and to do so with a reasonable amount of satisfaction, success, efficiency, and happiness."[1]

I think we cannot pick out an individual or group of individuals in an institution for the blind who have a monopoly on improving the mental health of the child. I do not believe the responsibility can be placed at the feet of any individual or group of individuals. It is the responsibility and obligation of every person who has to do with the institutional life of the child from the superintendent to the yardmen. There are, however, two groups of individuals who must take the lead in improving the mental health of the children; the teachers and the housemothers.

I believe there is an increase in the number of teachers dedicating their efforts to the advancement, understanding, and development of mental health. Knowing how with knowing what should be done is an important combination. The moments a teacher spends in chatting with a timid child before class or trying to discover the reason for a certain child's fear or another child's unpopularity may be worth more in the coin of human welfare and real education than the time he spends on drill in multiplication and the division of fractions. Teachers who give attention to child study and mental hygiene will find it easier to teach the academic subjects because the child will be conscious of being in the presence of an understanding friendly teacher. Boys and girls become confused in answering questions when they are not sure of what to expect from the teacher. You have heard blind children say, after giving an answer to a question, "But that could not be right" or "I am sure that is not the right answer to the question." Fear destroys confidence without which there can be very little teaching. The intelligent, sympathetic, understanding teacher will try to alleviate fear instead of using it to motivate some desired form of behavior. Fear is ordinarily an inhibiting rather than a stimulating force. I think this is true to a much greater extent with the blind than with the seeing.

The teacher who fails to see that the change from small family life to a large group life, from very few to many playmates; from over to under protection, is a revolutionary experience in the life of the blind child, will fail to deal adequately with the problem of mental health. The blind child does not need sympathy so much as he needs help in learning to compensate for the handicap. It would seem wise to remind the blind child that we are, all of us, compensating for some lacks in ourselves, and the encouraging thing about it is that we can. If the teacher wishes, she can be a most powerful mental hygiene influence in the life of every pupil, since everything she does

---

1 Joint Committee on Health Problems in Education of N.E.A. and A.M.A., 1939, MENTAL HYGIENE IN THE CLASSROOM, p. 9.

helps or hinders each child's development and growth. Her personal attitude establishes the emotional atmosphere of the classroom. When each pupil in her room feels secure with her, confident of her interest in him, and that she will be fair to him, the teacher will be building up in the child a sense of self-respect which will be valuable to the child all of his life. Teaching subject matter is important, but I wonder sometimes if we do not completely spend ourselves in pushing children through grades and have nothing left with which to give them, that will help them adjust to school and life. There should be some person to whom the student could go and unload, get it off of his chest, and out of his system. Yes, he will go back and apologize, as he should, but he will feel so much better.

An understanding of mental hygiene principles is indispensible to the teacher who is interested in the emotional life of the child. Symptoms of behavior disorders and of mental disease so often show themselves in the early years of childhood and for that reason the teacher will wish to inform herself about the various types of mental diseases, their earliest symptoms and development, possible causation and treatment. She will want to be familiar with the early danger signals which give evidence of beginning personality distortions and abnormalities in order that she may help the child to a more healthy mental development. An acquaintance with mental hygiene will help the teacher to distinguish between trivial and serious behavior difficulties and she will learn better how to handle such traits as moodiness, fear, excessive shyness, inability to make friends, resentment, seclusiveness, or other serious misbehavior, as they appear among her pupils.

I was discussing this matter of teachers with one of our graduates who is in the Divinity School at Duke University and he says: "All teachers should be mature people. In the employment of teachers in a school for the blind, it is important to have emotionally mature individuals without serious maladjustments of their own. Frustrated teachers should be avoided since a great deal of the frustration and fear fixation of the child can be traced to the classroom." He added, "Ridicule and picking on the class or students should never be used as a method of discipline." If the child can feel, confidently that the teacher is his friend, the gap has been bridged and the way cleared for good teaching and for wholesome living on the part of the child.

The housemother is the second in importance on the staff. The child has left home, in many instances a small family, and he has come to live in a big house with many rooms and many doors, and many children. To say the least he is lost and must necessarily be confused. The housemother is the first to greet him and what she does the first few hours and days will have much to do with the mental health of the child. From the very beginning the child must begin to have a lot of fun in order to reconcile him to the change. Planned play and recreation are necessary, at this point. Since the matron is replacing the child's mother for the time being, the child must have confidence and trust in the matron to the extent that he will feel free to go to her with all of his problems knowing that he will get sympathetic, friendly, understanding counsel. The housemother should plan games, story hours, and trips off the campus with each child in mind. Meal time should be a happy time for every little boy and girl. Little surprises here will pay big dividends. Birthdays must not go by unnoticed and unannounced, neither must we forget to mention Bill's new baby sister. Every child has the right to be the center of attraction a few times

during the year. Well planned play with boys and girls together will add much to happy living.

The housemother should give careful supervision at bedtime. She should see to it that boys and girls go to bed happy and contented. There must be no bullying of small and younger children by the older ones. The child who has been threatened by a stronger boy before he goes to bed will have a most unhappy experience as he tries to get off to sleep. To become frenzied at this time will not only mean the loss of much neded sleep but it actually may cause the child to be sick. To say the least, a housemother must be very careful to set the stage for a good wholesome atmosphere in which her children may close the day and get off to "Nappie's House."

Physical education and recreation offer splendid opportunities for the development of mental health, however, we must not overlook the oportunity here for developing mental abnormalities. Sometimes we forget that the shy, evasive, maladjusted, meddlesome, timid, boasting, clownish, bullying and antagonistic may all be found in the swimming pool, on the gymnasium floor or playground at one time. The timid child should be allowed to play in the shallow water at first where he can associate water with pleasure and thereby lose fear of it. Forcing a child into a fear producing situation will heighten his emotional disturbances. But you say a teacher would never do that, no, but the minute her back is turned or she leaves the swimming pool, some bully will and the results are the same. Many blind children have never been in more than a tub full of water and to be placed in a swimming pool and left alone with other boys is frightening, to say the least. Groups of children should never be left alone in the swimming pool or on the gymnasium floor because there will always be some pupils with partial vision who will take advantage of the totally blind. The child who is afraid to try new assignments should be assigned at first to simpler, less conspicuous tasks where opportunities for successful accomplishments are likely to produce the desired results. I doubt seriously that a blind child should ever be forced into any kind of activity. A child should never be ridiculed because he is clumsy. Most of our children have been closely protected at home and they are constantly fearful of bodily injury and therefore do not participate freely in new plays and games. They are potential subjects of mental ill health. Children who shrink from entering into games and play because they are afraid of being hurt must be led into play gradually and sympathetically.

A well planned recreational program chucked full of fun producing experience is a **must** in residential schools for the blind. Trips, picnics, shows, shopping tours, visits to historical spots, or places of interest, skating, bicycle riding, dancing, swimming, etc., take their place in importance with the academic subjects. These are activities that will give mental strength to our boys and girls. The children should be allowed to do some planning, at least they should be in on the discussions and plans. The child is away from home with time on his hands and it must be planned to make life rich for him. Refuse to do anything about the leisure time and the child sits around with his finger in his eyes, rocking, and rolling the head around, twirling rapidly around and around on one foot, shaking fingers before his face, and sitting with his head on his knees. These boys and girls developed blindisms because they have had too much time on their hands. The old saying that all work and no play will make Jack a dull boy is quite true. It is true, too, that either all play or all work

will make anyone dull. disagreeable, dissatisfied, and mentally disordered.

I think this paper would not be complete if I failed to mention the importance of a strong physical body. The goal of mental hygiene is the development of a tough, resilient mind which will withstand the stress and strain of daily life. A good mental condition cannot usually be maintained in an improperly nourished individual. Aroused by our government during World War II, we rightly gave much attention to the seven basic foods. They are important enough to mention here, and they are: 1. green and yellow vegetables; 2. citrus fruits, tomatoes, or raw salads; 3. potatoes, and other fruits and vegetables; 4. milk and milk products; 5. meat, poultry, fish, or eggs; 6. bread and cereals; 7. butter or fortified margarine. Failure to follow that daily diet is responsible for a large percentage of those who have developed mental disorders. Children who come to us have in the main eaten only the things they want with little or no thought given to a balanced diet. The fact that they are blind puts them in the position to get just about what they want at home.

Dr. C. B. Minner, writing in the TEACHERS FORUM, September, 1938, on "The Need for Mental Hygiene In the Education of the Blind," gives much thought to the problem of segregation. The article is stimulating and helpful to those who want to know and do something about the matter. When I came to the principalship of the N. C. School for the Blind, I came to work with a superintendent who had an open mind and a humanitarian interest in boys and girls. The practice of restricted social contacts had been followed completely. Some changes for the better, I think, have taken place, and it is these changes that I should like to mention. Our boys and girls are seated for chapel in the auditorium by home-room groups—boys and girls sitting together. At evening music recitals and Sunday evening Vesper Services boys and girls may have dates and sit together in the auditorium just as they would if they were attending similar programs in their home communities. Social hour is provided every Sunday afternoon at which time boys and girls may have dates and stroll around on the campus. If the weather is too bad for outside walking, they go to the gymnasium. Each Sunday evening boys and girls may go to the gymnasium for Folk dancing, under the supervision and direction of the physical education instructor. Our students attend Sunday School and church services off the campus and are allowed to attend parties planned by their church school classes. Added to this are the Hallowe'en, Christmas, Valentine, and Easter parties at which time students may have dates with the boy or girl of their choice. Hay rides are provided for the high school students. They usually spend about 5 hours including time for their meal along the way. The campus store is open each day, except Sunday, and boys and girls are free to visit the store at any convenient time for them. And with what results? you might ask—well it shows in neatly kept hair and clothing, shoe shines, cleaner speech, and happier living—all of which has to do with achieving mental health.

MENTAL HYGIENE IN SCHOOLS FOR THE BLIND

By
D. W. OVERBEAY, Kansas

From the standpoint of the mental hygienist residential schools for the blind are in a unique position of responsibility. They must assume the role of home and parents as well as that of a school. In addition they are dealing with a physical handicap which is understood by the public to a lesser degree than is any other.

The presence of a visually handicapped child in the home tempts parents too often to center their attention and concern on this child, either this or the other extreme—complete rejection of the child. In these instances the child enters school completely dependent on others and/or entirely helpless to satisfy his physical and emotional needs.

Each year many partially sighted youngsters of school age who had tried to get an education in public schools for the sighted, where little or no special provisions had been made for them, are being admitted to our schools retarded scholastically and often uncertain and rebellious. Here we see the results of unfavorable environmental conditions in the home and school as added handicaps to poor vision.

We are, then, challenged to operate a residential school equipped and staffed to understand problems peculiar to those who enter our schools. Every one of our schools is either helpful or harmful, from the mental hygiene outlook, to the health of its students. Either our curriculums meet the needs of children according to their various capacities or we are still forcing them into a cracked and ancient mold. We are either teaching children how to live with themselves and others or we are graduating dependent individuals whose attitudes make success impossible. We must foster a program which helps our pupils develop emotionally as well as physically and intellectually.

"Perhaps the worst failure of our schools has been that they've taught children everything except how to live."[1]

"To learn to live with ourselves is an art. To learn to get along well with others is an art. To become proficient in these two arts means that we must start very early in life, have understanding parents, friends or teachers to guide us in these arts, and we must practice patiently and persistently year after year in order that we may develop the type of personality that will make us well liked by others and happy in our human relationships."[2]

How then are we going to teach these two arts? Everyone must cooperate—administrators, house mothers and house fathers, classroom teachers, and other personnel. They must realize that these are skills which must be taught. The environment of the school may be conducive to the right kind of personality development but no pupil is going to become an adult well equipped to face life simply by absorbing the by-products of this environment. He must be taught Human Relations just as arithmetic and music are taught.

"Since the child during his maturing and training processes is the helpless victim of his environmental stimulation, the responsibility of providing adequate experiences for the growing child is great. If this responsibility is fulfilled, the child will be provided with a happy childhood and will be assisted in his establishment of habit patterns which will function toward his achievement of personal, social, and economic adjustment."[3] A residential

school for the blind has the opportunity to observe its pupils under better controlled conditions for longer periods of time than most schools. If the staff takes advantage of this opportunity to observe each pupil and uses information from aptitude, achievement, intelligence, and other tests plus data regarding home background; then an intelligent interpretation will indicate the best course to follow.

"Of the three fundamental adjustments —personal, social, and economic—the personal is of greatest importance. The child who understands himself and is able to resolve conflicts in ways calculated to solve the problems involved without at the same time endangering his security or violating his sense of what is right will have little trouble in his contacts with others. His chances of achieving economic security will be greatly enhanced. Psychiatrists, psychologists, and other specialists have contributed much to improved mental health in all schools. But the responsibility in schools for the blind rests, finally, in the hands of the teachers and supervisors or house fathers and mothers. They are the key people in determining whether the mental health of our pupils is to be effectively guarded. They must be selected on the basis of education, experience, special training, personal stability, sympathetic attitudes, and alert interest in visually handicapped children. Supervisors and teachers who do not genuinely like children and who are easily annoyed and intolerant have no place in our schools. House mothers and house fathers wield a tremendous influence on those in their care. For much of each year they must assume the role of father and mother. They are responsible for progress in self-reliance, cleanliness, table manners, self-control, respect for others, and cooperation. Theirs is a job which is too often filled by political appointees or "anyone who will accept the low salary." A misfit in charge of a dormitory or cottage can do much to lower the morale and magnify problems of the entire school.

"Teachers are in a strategic position to recognize and compensate for signs of early neuroticism. What she does to and for children in an atmosphere marked by affectionate relationships and a truly democratic classroom attitude is one of the active, daily processes of mental hygiene." (as applied to classroom procedures) Mental hygiene is not a discrete scheme of psychiatric procedures, nor is it a distinct body of fact. It is rather an attitude and a point of view that should influence everything that the teacher does professionally: her mehod of asking questions as well as her manner of accepting answers; the procedure followed in administering tests and that governing her supervision of playground activities; the appeals by which she stimulates the pupils' desire to participate in classroom activities and the measures to which she resorts to bring the unruly into line; her attitude toward the social child, and that toward the unsocial pupil whose timidity prevents him from mingling with others."[4]

"To learn to get along with others is an art." Our schools have the responsibility of teaching and offering the opportunities for practicing social adjustment. The socially maladjusted visually handicapped child is indeed an object of pity who regardless of aptitudes and skills must depend on charity for a livelihood.

We are obligated to teach our pupils how to be socially acceptable. Emphasis on personal hygiene and the correction of blindisms must permeate all schools. Unless our graduates are free of obnoxious mannerisms, unless they are personally presentable, everything else we do for them is wasted.

It is not within the scope of this paper to detail a plan for social acceptability. However, some generalizations are in order since social adjustment is so vital to mental hygiene. Every effort should be made to organize and maintain interest in those national organizations which bring our boys and girls in contact with sighted boys and girls—Boy Scouts, Girl Scouts, Camp Fire Girls, Y-Teens, Hi-Y, Cub Scouts, etc. Every effort should be made to interest all in the practice of correct table etiquette, good speech, and good manners. Boys and girls, particularly of high school age, should have opportunities for all the normal relationships enjoyed by mixed groups in our high schools for the sighted.

So we have the responsibility of teaching children to live with themselves and others. This calls for adequate physical equipment; the careful selection of able, understanding, and sympathetic personnel who can interpret data and implement a program designed to enable the visually handicapped child to successfully take his proper place in the world of the sighted.

BIBLIOGRAPHY

1. Bullis and O'Malley, *Human Relations in the Classroom,* The Delaware State Society for Mental Hygiene, 1947.
2. Ibid. 1, p. 217.
3. Crow and Crow, *Mental Hygiene in School and Home Life,* p. 4. McGraw-Hill Book Co., 1942
4. Rivlin, Harry, *Educating for Adjustments,* p. 1, D. Appleton-Century Company, Inc., New York, 1936.

COOPERATIVE GUIDANCE IN SCHOOLS FOR THE BLIND

By
MAE E. DAVIDOW, Overbrook

To future generations the Twentieth Century will probably be defined as the Age of Individualism, for it is a period in which the chief emphasis in all phases of living is upon self-understanding and self-expression. Twentieth Century education, a field designed to train young people for life in their contemporary society, has consequently adapted itself to this trend by innovating new methods and policies for the molding of well-adjusted and well-integrated personalities. As a result of this development, the public school systems came to realize the importance of a personnel whose entire work would consist of studying the pupils and helping them individually to understand themselves and to become adjusted to their educational and social environment. It later became evident that guidance would be more effective if the classroom and homeroom teachers would participate, in addition to the special counselors, in a carefully planned program. Thus today guidance has become an invaluable and integral part of the school organization.

It is strange indeed that this new tendency has not been accepted with the same enthusiasm among schools for the blind, where students are more likely to have adjustment problems. Within comparatively recent years some schools for the blind have instituted a type of guidance work, but in most cases there has been no really systematized program. More successful achievement has been attained in the placement field of vocational guidance, but little advising has actually been done until the junior or senior year, and by that time, the students have already pursued courses which may not

always be suited to their vocational needs. Furthermore, some of the students may still be confronted with emotional or other problems which might eventually hinder them from executing any task assigned to them with the efficiency of which they are capable.

Certainly the students who have been graduated from our schools have received advice from interested faculty and administrative personnel; but advice in itself is not sufficient, since it does not stem from a real problem requiring the cooperative and continuous efforts of all personnel in aiding students to recognize a problem before attempting a solution.

The field of guidance may be divided into several interrelated areas: personal, educational, religious, hygienic, recreational, social, vocational, and civic. In order to be complete, any guidance program must cover each of these phases. Naturally the foundations of adjustment are laid in the training a child receives in his early years; but this paper is concerned only with secondary school guidance.

Since the newer philosophy of education is concerned with the development of the whole child—physically, emotionally, spiritually, and mentally—psychologists have found that the adolescent has the most difficulty in making the adjustments essential in his society. **Fritz Redl,** Professor of Social Work at Wayne University, has made an intensive study on adolescence. In his article entitled, **Adolescents and What Makes Them Tick,** he states that:

> . . . the most peculiar phenomena are found in the area of adult-child relationships. Many children who obviously love their parents and have reason to do so, will develop stretches of surprising irritability, distrust and suspicion. They are easily offended and constantly ready with accusations that adults don't understand them. And yet, while the concept of gratitude seems to be something stricken from the inventory of their emotions, there are other areas of life where they become more sensitive rather than more crude. . . . During preadolescence the well-knit pattern of a child's personality is broken up or loosened, so that adolescent changes can be built into it and so that it can be modified into the personality of an adult.*

In order that this modification can be accomplished to the best advantage in the development of the child, it is essential that a school have trained personnel in guiding the child through this change. Surely, then, it is during the junior and senior high school years that we as educators, interested in the development of complete and natural personalities, should turn our most sincere and energetic attention toward aiding the students in establishing the proper concepts. Our efforts will be in vain unless the entire school staff consists of those who are "guidance-minded"—who recognize the need, who are genuinely interested in the students, and who are willing to give of their own time to understand them.

The ideal program calls for a guidance counselor who does not teach but who comes into close contact with the students through extra-curricular activities, as well as through individual conferences. She will be responsible directly to the principal, and will organize a guidance program to be carried out with the help of homeroom sponsors and classroom teachers. If it is not feasible to have a counselor especially trained for this work, the guidance policy of the school should be determined by a faculty committee headed by an administrative officer, and assisted

*Redl, Fritz. "Adolescents and What Makes Them Tick" *Child Study,* January, 1943.

by other members of the faculty and staff. In any case, every school for the blind should have a highly trained psychometrist ,whose interpretation of test results is an important factor in deciding the most effective procedure for educational guidance.

The teachers, whether homeroom or classroom, must play a leading role in the guidance program because of their daily direct contacts with the students. The direct contacts with the students. It is largely through this observation and recommendations that the counselor or committee in charge of guidance is kept informed on the progress of each student. The teachers should come to realize that as they influence the student by their presentation of subject matter, so they influence him by their personal interest in him. It should be of paramount concern to all teachers to remove emotional blocks which are often responsible for retarding the mental and emotional growth of the child, making learning an impossibility under such conditions. The development of the whole child is more important than any subject matter taught him. Not until we actively search out the underlying causes can we possibly understand why a student behaves as he does.

The behavior of every individual is influenced by his experiences of the past, his situation in the present, and his hopes and fears for the future. At different periods of his development, however, the individual may be dominated more by his conception of one of these influences than by either of the other two. In schools for the blind particularly, students, who have reached their last years of high school and who are confronted with the insecurity of their future in a world of limited occupations, require not only vocational guidance but also personal guidance. If this need were only recognized, and if those engaged in guidance work would only take the time to discuss this problem with individual students—speaking both as teacher and as friend, with interest, frankness, and understanding—much anxiety would be avoided. Often the emotional patterns of these students are sufficiently disturbed so that there is noticeable change in the quality of their work and in their general disposition. Here again, the classroom teacher can analyze the difficulty by close observation and study before attempting or recommending a possible remedy. It is her responsibility to know each student well enough to recognize problems that should be referred to the counselor.

Although the classroom teacher plays an important role in the guidance program, the contribution made by housemothers or house-parents is invaluable. Too frequently in the past, guidance programs were set up without taking into consideration the fact that at least one-third of the sudents' school day is spent under the supervision of house-parents—not teachers! Obviously, the dormitory provides opportunities for much informal training in the various fields of guidance —particularly personal, social, civic, and recreational. If house-parents can win the confidence and affection of the students under their supervision, they can play a significant part in modifying behavior among them. The house-parents in charge of school dormitories and the visiting teachers who contact the home should all be familiar with the guidance work of the counselors and teachers, in order to cooperate with them, thus insuring further success of the program.

The guidance program must be consistent in order to be complete. We are too prone to consider only the students' relationship with others who are visually handicapped, rather than their relationship with those in the "sighted" world, with whom they will be primarily asso-

ciated after graduation. Within recent years, the administration at Overbrook, recognizing this need, has greatly stressed the value of training for the wise expenditure of leisure time. In addition to attending churches in the community, lectures and concerts, as they have done heretofore, our students now participate actively in community organizations, such as Y-Teens, Hi-Y's, and Scouts. Many of these activities have been coeducational, in order to create a more normal situation. The opportunities for guidance, which such situations render possible, must not be overlooked, and guidance personnel, teachers and house-parents should certainly consider extra-curricular activities to be another field in which to observe and motivate student behavior.

The physical education program, while generally assigned to the field of recreational guidance, actually combines with the medical program of the school, in order to establish proper concepts in the field of health. Since a student's physical condition seriously affects his emotional patterns, and his emotional characteristics, in turn, affect his physical welfare, the physical education instructors, doctors and nurses should also understand that they, too, are an integral part of the guidance program—both by way of acting as consultants for the rest of the school's personnel, and in the promotion of concepts aimed toward the integration of the individual.

In this paper I have tried to present not the structure of a complete guidance program, but rather certain ideals which will lay the foundations upon which to build. Thus it becomes imperative to such a program that the entire staff of the school consider themselves as guidance personnel, and that the guidance committee or counselor be regarded as an administrative agency to help give the total guidance program direction and be an agency for consultation on special problems. If each member of the faculty and staff could himself be motivated and inspired through the realization of the importance of his own potential contributions; and if he would offer to the students the services of his broad experiences, mature judgment, keen perception and kindly understanding, then the students would recognize a unity of sincere, cooperative effort directed toward their own personal success.

A GUIDANCE PROGRAM IN THE SCHOOLS FOR THE BLIND

DR. S. M. WHINERY, Indiana

In considering a guidance program for the schools for the blind, let us pass over the many historical phases of the subject of guidance from the time of Louis Braille, and many others in this country, down to the present day with most grateful recognition of the great debt that we today owe to these pioneers for their blazing a long trail to the end that we today may guide the destiny of hundreds of blind children more effectively.

As I conceive it, guidance in the field of education for the blind begins with the underlying basic philosophy that the blind individual needs help and assistance, in much the same ways, and for the same reasons, from the rest of society just as any other citizen needs a period of training in order to realize ultimate happiness in life. Certainly this seems axiomatic in a country where we are taking for granted such ideas as workingmen's com-

pensation, old age pensions and the conception of social security generally.

As we look back now, or perhaps we may say, looking over the evolutionary background of the modern school for the blind, there may be certain aspects in which this school may be somewhat disassociated from the whole of society. If this be true, however, this same minimum of dominance by society as a whole puts an even greater responsibility—even a decidedly more untramelled opportunity for guidance which should result in unexcelled achievement of the ends sought by our guidance.

Limited numbers of the blind have tended to make for slowness in the development of techniques, appliances and the development of the Braille code itself, not to mention such angles as special training opportunities for teachers and other staff members. A pertinent illustration is the fact that while in general education some forty years ago the movement began which afforded tests, measurements and scales for the public schools in many subjects, it is only in the scant two decades past that such pioneers as Dr. Hayes and others have begun to adapt such materials for use with the blind. Compared with the field of public education, these materials are still available only in very limited areas. In making this comment, I would in no way cast aspersion on the efforts of the many who accomplished much for us, but rather to invite attention to the fact that a comprehensive guidance program for us is today definitely handicapped by not having available those measuring tools and devices found so useful in education generally. To me, guidance in schools for the blind depends just as much upon the development of fine tools, techniques and devices as our modern industrial production is dependent upon highly developed gauges, jigs and fixtures. Adequate growth in this area seems to me to the most hopeful field from which the future success of a complete guidance program for the school for the blind can come.

The problem of a comprehensive program of guidance is one of the greatest challenges of all members of the staff of a school today, and it is a challenge to each member of the staff from the member of the Board to the most menial janitor or cleaning woman. Good guidance is an all-inclusive and cooperative function. In athletic parlance, each member of the team including the coach must intelligently understand the play and cooperate to make it a success. Guidance must be a coordinated effort, participated in by superintendent, principal, teacher, housemother and each other employee whose function affects the child. If one member of the staff fails to cooperate in a guidance program, it may jeopardize the success of the whole school.

The most desirable guidance is carefully integrated throughout the school as a whole, both from the first grade to the last grade, and laterally through all divisions and departments. It must also take into account the natural abilities and aptitudes of the individual and attempt to envisage his probable future life span, not only vocationally, but morally, socially and as a citizen of the community.

Some aspects of guidance that have been neglected or overlooked, at least until recently, are guidance in the social relationships of students and guidance in matters of personal relationships, systematic attention to the overcoming of "blindisms," as well as locational orientation guidance techniques and devices.

There are various phases in the matter of guidance which seem to me too fraught with possible danger. The most disastrous one is probably the tendency to allow the several subdivisions of guidance to occupy the attention of staff members with the

result that we lost sight of their integration with the whole. The "tail may come to wag the dog," or guidance may come to be a matter of guidance within "water-tight compartments," or in terms of the poem about the blind men and the elephant, we may tend to lose sight of the elephant, and substitute the several parts, instead. The best antidote against this situation is a continuous re-evaluation of the aims of guidance in terms of the school as a whole, by all members of the staff. By doing this, the first grade teacher will be sympathetic with the work of the industrial department, the social studies' aims will integrate with the music work and housemothers will understand the social aims of school parties.

In closing, may I hasten to remark that we do not feel at Indiana that we have achieved the ideal. We are not sure at times that we are entirely on the best track. We are, however, working away at the job, and trying at all times to get good ideas from others. We do believe very sincerely that it is worth while to have a worthy goal toward which to strive.

HOW BAD ARE WE?

By

FRANCIS M. ANDREWS, Maryland

Are we failing as superintendents and teachers to give the pupils in our residential schools all the instruction and aids for good citizenship which will make our graduates and non-graduates happy, well-adjusted individuals?

There is apparently some feeling in high circles that the residential school is not doing a good job. The recent hearings in Ohio held to ascertain the value of the residential school as opposed to the day school should make us all aware that there is a definite desire on the part of some people to do away with the residential school. Such a trend to combine educational services for the blind by incorporating them in public school day classes places the training of the blind child in serious jeopardy.

We have heard that the product coming out of the residential school is not up to standard; that many cannot find jobs or hold them; and that others have been improperly trained. The placement agents don't like us. The department of rehabilitation doesn't think much of our product, etc., etc. The placement agents certainly must be aware of the fact that most of the blind people with whom they work have never attended a school for the blind. In some cases those who did attend such schools have been away from the schools for several years before anything was done for them by the department of rehabilitation, or some other agency. By far the greater majority of people from the residential schools who appeal for assistance are not graduates of the schools. They have left for numerous reasons: some were mentally unable to graduate; some were emotionally unstable; some were dropped for the good of the majority, etc. The fact that these people did not graduate indicates that there were additional problems other than blindness. Yet the schools are far too often blamed for all these misfits whether they had attended day school or the residential school. Some would be misfits whether they were blind or sighted. We must not lose track of such facts.

We are accused of institutionalizing our

boys and girls, of regimenting them, of trying to educate them beyond their abilities, of giving them high ideals, of weaning them away from their homes. At the A. A. W. B. Convention last summer, one man said we do everything by a bell. How, may I ask, are we to get pupils to places without some such method? The answer is: Do away with the residential school. All the above are generalities and, therefore, dangerous. They are considered crimes against the individual and certainly a condemnation of the residential school. Our critics say that the solution of the problem is to place the pupils in day classes and foster homes. This may be the answer for some but certainly not for all.

Is it not a little ridiculous for the opponents to advocate the elimination of our schools? If all they say about the ills of the residential school is true, then why should there be any private schools at all? Let us eliminate Andover, Exeter, Taft and hundreds like them if it is so terribly wrong to educate a child away from his home. It sounds foolish, doesn't it?

From the 1941 report of the Board of Education on the Physically Handicapped children in New York City Public Schools with reference to the work of the Day Classes for the Blind, I quote: "Forty-four children were selected for testing, twenty-three of whom were unable to read Braille sufficiently well to take the tests. There is a lack of special teaching equipment such as Braille writers, talking book machines and records, and relief globes and maps." That was in 1941. We hope conditions have improved since then. It certainly would be foolish for me or anyone else to condemn all public school classes for the failures or partial failure of one.

Mr. George Keller, Supervisor of Services for the Blind, Department of Education, Vocational Rehabilitation Division, Baltimore, has stated: "Training of students in a public, vocational school is desirable although it is doubtful that the handicapped student will get the individual attention he requires in view of the size of most classes."

A teacher in one of the Braille classes of a large public school system recently made this statement: "We claim we do so much for the child, but you know and I know that we cannot do all we claim. You have the children all the time and can do so much more."

Let our critics bring forth good, honest, constructive criticism upon which we can build. Let them be specific in their complaints so that we may know exactly of what they are talking. A broadside statement saying we are all wrong does no good. It would be just as asinine for the writer to say that all day classes are of no use. Some of them are excellent, and there may be others that are not so good.

At the A. A. W. B. Convention held in Baltimore last July, one speaker remarked that it was time the superintendents of our schools stopped acting like ostriches, hiding their heads in the sand, not knowing what was going on in education. No exceptions were made. Yet when some of the superintendents present voiced their objections, we were accused of being on the defensive. Surely if we believe in our work, we are not going to sit quietly by and fail to defend that in which we believe.

I quote from another speaker at the same convention. Mr. Clunk: "There has been much talk on the subject of the characteristics of the average school for the blind student, and many school administrators become emotionally defensive when the subject is discussed. Criticism and argument are of no value, but an objective analysis and active cooperation between the State Agency and the schools for the blind can produce a mutually satisfactory result. Instead of cri-

ticizing the schools for the blind, it is time we assisted the staff of the schools in producing graduates who are acceptable to the outside world and who can be placed in various occupations with maximum security." I suggest that everyone read Mr. Clunk's paper which is found on Page 66 of the Proceedings of the A. A. W. B., 1947. This article should also be read to the pupils.

Let us forget this petta jealousy and bickering which goes on concerning the residential and day schools. Let us stop calling names and get down to the business of giving these boys and girls the best all-around education possible. Such an education naturally emphasized knowledge obtained from books as well as from classroom instruction, but it must cover more than these. Our students must learn the social niceties, how to travel alone, the control of blindisms, to free themselves from institutionalism, to develop proper table manners. Certainly they should be instructed in personal hygiene, and then add to all this anything else which you believe necessary if we are to make each boy and girl, who just happens to be blind, a normal individual. That is a big order, but, if we are going to do the job well, we must be willing to tackle it; and everyone from the superintendent down to the handy-man must do his part.

If any superintendent is interested only in being an executive and fails to know his pupils, I believe he is aiding our critics. None of our schools is so large but what it is possible for the leader to mingle with his students. He should know them in the class room, in the study hall, in the cottage, on the playground and in their homes. Do the boys and girls feel free to come to you with their problems? Do you give them that opportunity? Do you know the rules and regulations which your teachers and supervisors make? In other words, do you actually know your staff, your pupils and your school? Do you encourage your better pupils to attend public high school?

The Kentucky and The Maryland Schools for the Blind send their more promising pupils to the public schools of Louisville and Baltimore for their eleventh and twelfth grade work. The pupils return to the residential schools where teachers are assigned to read their homework to them. This gives the older students a taste of competition with sighted pupils PROVIDED the public school accepts them on an equal basis, insists that the blind pupils do their work and requires them to be an integral part of the school, dependent on no one. If concessions are made, the system breaks down. A cooperative spirit between the schools must exist, and the burden of seeing that the plan works rests with the superintendent of the residential school. It is our hope that this plan will allow the blind student to make many friends among his seeing classmates, that he will join clubs, go to the school dances, be invited to the homes of some of the students and in turn invite his friends to come out to some of the social functions at the school for the blind. Unfortunately, however, this is far too often only wishful thinking. Occasionally we are able to arrange for a pupil to attend his home town high school. This is, indeed, the exceptional student whose family thoroughly understands the situation and is willing to and can do the reading for the child. Then, too, we have to think of the type of high school in the individual's home town. Is it as good as the larger city system? Does it offer as much to the pupil?

To the blind child in a large city such as Baltimore, where there are fifteen hundred to two thousand students in the high school which he attends, there are disadvantages. Competition for places on

teams, etc., is very keen, and our pupils lose out; but, living at the residential school, they still find an opportunity to take part in all the extra-curricular activities that they can handle. One boy who had been in public school, then came here and later attended the city high school said to me: "My years at the school for the blind were of inestimable value to me. I could not get on the athletic teams or be in the school play in the big high schol, but at the residential school I had that opportunity. The experience thus gained was of tremendous help to me. The individual assistance, the advice of teachers and supervisors which I received in the residential school could not be given to me in the public high school due to the large number of students and the fact that the schol was overcrowded. I was one of hundreds there and only one of seventy-five here. I shall be eternally grateful that part of my training was in a residential school."

What is the philosophy of the residential school? Is it bound by rules and regulations, antiquated ideas and non-progressive methods? Do we expect from the students the same things we expect from our own sons and daughters? Or do we have a set of rules for these blind children which is entirely different from that for the seeing? We certainly want them to act like normal human beings, but what are we doing about it?

At The Maryland School for the Blind pupils may receive permission to go to Overlea or Baltimore by asking the Superintendent. They attend the movies on week-ends. Any pupil may visit the homes of other students or their friends provided he has written permission from his parents. It is a common occurrence to find our boys and girls together at the "Diner" or in the drug store. Some may say our students have too much freedom, but seeing boys and girls do these things; why not the blind? Are we shocked when we see sighted boys and girls together? Certainly not! Do we say: "What is this world coming to?" There are still people in work for the blind who highly disapprove of any such goings on and are shocked and worried by it. Our pupils are human beings; they are young; they must be trusted. Have we forgotten our youth? If so, Heaven help us! Are we going to build up self-respect in our pupils? Do we want them to become independent? The answer obviously is "Yes." Then, let us help them to achieve that goal and not hinder them. This trust will assist in taking care of peculiarities which some blind people might have.

The writer does not know every residential school. Many of them are doing an excellent job, but none of us are perfect. I believe in our product; I believe in our work; and I certainly have faith in the residential school.

What have we to offer? A staff trained to handle all these handicapped children. Classes with few children in them so that each child receives a great deal of individual attention. A wealth of special aids for training the blind. Equipment such that it would be prohibitive for every public school to maintain the same. A vital interest in the diet, medical care and personal appearance of our pupils. A well-balanced program of literary, vocational, musical and physical education.

Many of our graduates are holding important positions; so, too, are our non-graduates. Yes, there are failures, but are they failures because they are blind and went to a residential school or failures because they happen to be themselves, regardless of handicap or education?

Have faith in what you do. All of us who are residential school people should firmly believe in such schools or we should get out. There are too many people in this world doing work which they not

only dislike but in which they have no faith. They haven't the "guts" to throw aside the job and get into something in which they honestly believe. If there are people in our field who are so interested in their own advancement, self-glorification and pride that they have lost sight of the people whom they are supposed to serve and for whom they should work, then they should leave the field. We as superintendents and teachers should never lose sight of the fact that if it were not for these pupils we would not be where we are. Let us be worthy of our hire.

AS I SEE THEM

DR. FRANCIS J. CUMMINGS, Delaware

We are in an uneasy age. A critical, yes, a hyper-critical age. Everywhere about us people are asking, "What's wrong with religion, what's wrong with democracy, what's wrong with our educational system." Yes, ladies and gentlemen, there are those sacreligious enough even to scrutinize our educational system.

And why not? All this reevaluation is for the good, provided it isn't carried too far and isn't indulged in simply for the sake of venting spleen, or of startling the timid with a show of sophistication. Wholesome criticism cannot but improve religion, democracy, or education—possibly even the education of the blind.

You, yourselves, by your very presence at this convention acknowledge the need for improvement in the work you are doing—unless you have come here merely to slap each other on the back and hoist a few noggins to your glorious achievements. But I know you have not done this. You are here to exchange ideas, to try collectively to bring solution to many hitherto unsolved problems: to criticize and to be criticized.

Now that religion needs criticism does not mean it should be overthrown. That democracy is so far from perfect does not automatically recommend its antithesis. That we have dandruff does not call for decapitation. And so, I assure you, that though I recognize the presence of pesky pellicles on the educational scalp, I intend merely to shampoo gently, not to chop off heads.

What I say to you this evening is not the opinion of one observer alone. I have sought the collaboration of many others in the compilation of this critique of residential schools for the blind in the United States. It is true, that representatives of every school are not present in this band of helpers, but many institutions have been evaluated for me by intelligent blind people who themselves have lived there, who in most cases love their Alma Maters and who offer criticism, not in the spirit of rancor or bitterness, but as well wishers, interested alumni, whose life experiences have shown them the virtues and defects of the education they received in their youth. And who am I who presume to make this compilation and join to it some of my own ponderings? What right have I to attempt an appraisal of the effectiveness of your strivings? Well, as physician-like, I am about to diagnose and prescribe. Also physician-like, I should show my credentials. I am hardly a layman in the strict sense of the word. Blind myself, a graduate of a school for the blind, I pursued for many years the same elusive goals that many of you daily strive toward. For seventeen years I taught blind students, at first on a part time basis in conjunction with my teaching of seeing

students elsewhere, and finally on a full-time, a very full-time, basis. And for nearly six years now, I have been carrying on an integrated program of services to the adult blind, including financial aid to the blind, a summer camp, a vocational rehabilitation under Public Law 113. Thus, I feel that I have peeped at the doings in the world of the blind, including the residential schools, from many angles and have several points of reference to guide me.

So much for the credentials, now to the diagnosis and recommendations.

First of all, let me assure you that I am a firm believer in the need for special residential schools for the blind. I am convinced that all blind people cannot be educated in public school classes. On the other hand I feel strongly that no otherwise normal blind child should be kept in a special school any longer than is required to equip him to merge again with the stream of life, life in the world of the seeing. This may be after two or three years; it may be after many years. The decision must be honestly and scientifically arrived at in each individual case, and without reference to enrollment.

Secondly, may I say that experience as a teacher of the seeing, as well as the blind, has convinced me that most, or at any rate, many of the denunciations being leveled at schools for the blind, valid though they may sometimes be, are directed at defects of our educational system in general and, indeed, can often be found in schools for the seeing in even more flagrant form than in schools for the blind. My allocution here tonight will, therefore, not participate in these mighty attempts at general educational reform but will confine itself to some specific observations I have to make on schools for the blind.

Now, first of all, what is this thing called blindness and what does it do to people? The public generally—and, alas, some of those in work for the blind—think of blindness as something akin to death, wherein one is deprived of just about all the joys of earth, including the right and the ability to mingle on an equal footing with the more favored—more favored visually, at any rate. Well, there are many deprivations incident on blindness but we are not quite so abject as all that. To me, the most crippling element in blindness is not the inability to appreciate adequately the beauties of nature, not the fact that I do not see the faces of my friends, the smiles of children—no, the most crippling element in blindness is restricted mobility, the fact that I cannot move freely when, where and how I please as my fellows do, that I must—unless I would stick to the rocking chair—seek aid in situations that hold no complexity for the average child, crossing a street at a busy intersection for instance. Much has been written about the limitation in the variety and range of experiences of the blind. I believe that this limitation can be dealt with, if only in part, by increasing the facility of movement.

My first recommendation then, is more freedom of movement for the young blind and a sound course in orientation and travel for the older pupils. Indeed, there would seem to be no good reason why the orientation phase can't be developed even in the very young. This course in orientation in travel should be conducted jointly by a well-adjusted blind person and an observant seeing colleague. If either, for reasons of economy or other, must be dispensed with, let it be the seeing colleague. No one knows as much or can ever learn as much about orientation and travel of the blind as those who have eminently mastered the difficulties involved.

If restricted mobilitty is the primary curse of blindness, a close second is the

inability to observe and imitate others. You understand, of course, that I am not advocating slavish imitation of another's personality. No, the imitation I would advocate has to do with social behavior not with the cast of the soul. But we live in society and are often judged not so much by our intrinsic merits as by our ornamental tinsel. It is no doubt noble to defy the world and its emphasis on the superficial and, recluse-like, follow a course of pure individualism. It is noble, I say, but also very inconvenient. Perhaps you will understand the sort of imitation I refer to and the kind of insecurity that results from its absence if you will recall how often you yourself, in an entirely new situation, have kept your better eye cocked on the cosmopolite across the way and how, albeit with a show of nonchalance, you mimicked his every move. Think of our plight in a similar situation. One of the letters that I received in reply to my epistolary survey made in preparation for this paper contains a paragraph that to me is quite illuminating on this point. The writer, a brilliant well-adjusted, highly-accomplished and highly-successful man, blind since early infancy, calls for more emphasis in our schools on and I quote "Sòcial amenities; facility in meeting people, not to mention subsequent mingling on a mutual basis. The much-vaunted public programs certainly have their valuable place, but in my opinion do not begin to solve my gripe. One reads occasionally of schools that introduce courses in 'etiquette' and incidently, wonders what becomes of such courses. My notion is that probably more could be accomplished by the concerted efforts of all teachers than in a class meeting once or twice a week. Whatever the solution, I believe it more essential than learning to extract square root, locating the Fiji Islands or even so indispensable a feature as counterpoint."

If this man, without blindisms and universally accepted socially, feels thus, what of the less favored? Yes, ladies and gentlemen, something more must be done in this important area.

Valentin Hauy was undoubtedly one of the greatest benefactors of the blind, but uncritical application of his dictum, "The blind must be like the seeing," has worked much hardship. What the blind went through with the fetish of line-type until one of their own broke the bonds is a story too well known to be repeated here. It is, alas, merely one of the more flagrant attempts to fit the blind to the Procrustean bed of visual percipience. We live in a seeing world, it is true, and therefore must conform, outwardly at least, to the current folk-whims of a seeing society. But is that a reason for showing the blind child little pigs in two dimensions so he will better understand the story of the three-dimensional Three Little Pigs? And this is merely one of the more amusing errors. In poetry, fiction, clay-modeling, etc., as Lowenfeld, Cuttsforth and others have pointed out, let the child create according to his own impression, not slavishly by imitation of the visual.

One of my correspondents reported a conversation that bitterly denounces such practice, in fact, indicates a woeful swing to the other extreme. A graduate of a school for the blind was talking to one of the pupils. The boy asked how seeing people "know what we should do and how, when they have never been blind." The older companion told him to conform while at school but do as he pleased afterwards, even in relation to eating, walking, or any of the other normal activities. He averred that it was better to recognize one's limitations and do what could be done within them rather than to claim to be able to do things one couldn't do at all just to suit the fancy of some who think they are teaching the blind to be

normal and who are only, in reality, making many of them into pathological liars and consequent misfits.

The man giving such advice is as intellectual as anyone in this room. Yes, you will say, he may be intellectual but he lacks this or that. Well, he has been formed by one of our schools for the blind and whether his present outlook is a direct result of the schools teaching or a revulsion to that teaching, the fault would seem to lie ,in part at least, with the school program. What are we going to do about it? Say, as I have heard teachers in the school for the blind say, "Oh, he is a disgusting type. I am glad we have boys like Johnny Smith" (usually a meek and mild moron)? Just as earlier I recommended collaboration of blind and sighted professionals in orientation and travel, so do I recommend a similar collaboration between well-adjusted blind people, with or without formal psychological training, and the seeing psychologists who are supposed to set up programs for the eradication of blindisms and the wholesome moulding of personality of the blind pupils. "Can there any good thing come out of Nazareth?" was once the cry of the smug; and many of the schools for the blind might well echo it. The best soldiers often come up through the ranks, and in my opinion the best teachers of the blind also. Those who have successfully overcome their handicap and are otherwise equipped by nature and training should be called upon. Oh, I know, all of you will point out there are blind teachers in this or that school, but most of them will be found in very insignificant positions, tolerated more often than consulted. The experience of intelligent well-adjusted blind people is an invaluable resource for educators of the blind, a resource that has scarcely been tapped.

I often think that some Superintendents and others in authority have no faith in their work. If, as they would seem to maintain, the blind are educable then why, when educated, are they not acceptable?

One of the letters that I received expressed the opinion, this time of a seeing person in the work for the blind, that our schools need to give the pupils a more realistic outlook on life. Certain schools, my correspondent says, just about convinced their blind pupils that there is very little ahead for them, whereas others turn them out fortified only with the facile notion that the world is their oyster. We must give our pupils more personal responsibility. We must teach them the value of money and of their talents in relation to money.

Let us try to eradicate from the personality of our children what I call the "ostrich complex". Too many blind people, because they do not see themselves, ignore the fact that they are being seen Thus highly intelligent and really capable people give their seeing fellows the idea that they are a bit ridiculous.

Let us teach our pupils only what they can absorb and use, and let us develop tests that will honestly measure achievement, not merely prove to us "objectively" that we are doing a fine piece of work.

Pay your teachers a respectable professional salary, and then insist that they be well trained and, more important yet, devoted to the cause and not in the institution merely because they can't find anything else to do. Incidently, some of the best teachers of the blind that I have known were not highly trained but were deeply devoted to their pupils and to their work. They were not perhaps the best teachers when judged by so-called objective standards—which change every couple of years anyway — but they were surely the best in their fine influence over the children in their care.

Let's stop hiring teachers because of their capacity for errand-running, traffic regulation or espionage. These are no doubt very laudable pursuits but have no relation to the subtle psychological process of teaching. Let's hire those with the mentality of an errand boy to run our errands but let's engage as teachers that higher type of humanity capable of spiritual inter-communication with our pupils.

Many egomaniacs among the blind are the result of the abuse of the "Show-horse practice"; i.e., using blind pupils, especially good musicians, to advertise the institution. Let's keep this practice within bounds.

Treat your blind pupils, yes, even your blind teachers, like God-made creatures, capable of human dignity, of human feelings, and of making their own decisions.

Let's distinguish between the "just blind" and the mentally abnormal students who are also blind. The two groups should be separated, and the major handicap should determine the institution to which they should be sent.

What I have said, ladies and gentlemen, by no means exhausts the subject, but I am sure it has exhausted you. With much of it many of you will not agree. Also, there will be those who will claim that none of this applies to their school. Well, somewhere along the line I mentioned the "Ostrich complex." Perhaps it applies not alone to the physically blind. "None so blind as those who won't see." In any case for what it is worth you have my appraisal. Many good things I might have said about schools for the blind but I was brought here, so I believe, to diagnose your ills. My benediction upon you, ladies and gentlemen, in your future efforts to bring to America's blind children a modicum of the opportunities for self-realization that are the birthright of the freeborn.

BY THEIR FRUITS

HARRY J. DITZLER, New Mexico

In this utilitarian age as never before, creative processes are evaluated in terms of tangible results. Mass production is predicated on standards of quality as well as mere quantity; the author is rated by his best-sellers; the athletic coach's contract stems from his ability to turn out winners; professional and commercial schools gain recognition by way of their alumni. If products afford the best yardstick for measuring all sources, schools included (the idea seems reasonable), is not the same criterion eminently applicable to the residential school?

Here, formal education is but a phase in the setup which, during the all-important formative years, assumes a dominant role in the functions of home and social environment. Because a school is neither better nor worse than its staff, we who labor in such schools have a tremendous responsibility, and, likewise, a tremendous opportunity.

Taking inventory is an integral part of any sound business; so, with just that in mind, the help of residential schools for the blind throughout the country was sought. They were asked, first, "How many students have you graduated during the past twenty-five years?"; then, "Approximately, what percentage of those graduates is self-supporting?" It was felt that the twenty-five-year span would provide a fairer picture than a shorter pe-

riod in that the former better encompasses the economic cycle. Finally, schools were requested to give biographical high lights on a few of their outstanding graduates. Believe me, the response on this score constitutes a veritable Who's Who in diverse walks of life! While it is impractical to relate, here, the story in toto, we, so intimately concerned, are entitled to a sampling of these inspirational data.

Graduated from the Illinois School in '36, our first exemplar "Received his doctorate in physics from the University of Illinois; was assistant professor of physics for a year at the University of Missouri; and went next to the University of Chicago to work on experiments in atomic energy."

A Washington State School graduate "spent five years making brooms in a sheltered shop, meanwhile saving enough money to open a small record shop. Business prospered to such extent that he now has in his music store an inventory of records alone, exclusive of instruments, of well over twenty thousand dollars."

A North Carolinian entered radio upon completion of his schooling. "His work led to his being called to New York by one of the leading broadcasting companies, for special study; and he is now chief announcer at a radio station in Charlotte."

A young man finished high school in Michigan in '43, having availed himself of all the trades courses offered at that school. "Returning to his home city, he, totally blind, opened a small shoe repair shop, and now has two or three employees."

The success of blind people in civic posts is no novelty. Of Iowa's ninety-nine County Attorneys, three are alumni of that state's school for the blind (two of them entirely without vision). North Carolina boasts a Municipal Court Judge, while both Virginia and Pennsylvania are blest with at least one legislator singularly blind to the enticements of the lobbyists. Batavia contributes, of all things, a tax collector! The array of public servants from our ranks is probably more imposing than we realize.

Impressive is word from New England to the effect that four sons of Perkins are active lawmakers in those parts: three in Massachusetts, and one in Rhode Island, all four having been reelected one or more times. A Massachusetts Representative is a member of Committees on Education, and Power and Light, and Chairman of the Recess Commission on Education; another is ranking member on the Legal Affairs Committee, and serves on the State Affairs Committee; the third is on Committees on Departmental Rules and Regulations, and Conservation. The Rhode Island legislator was graduated from Perkins in '32, and, contrary to general practice, was permitted to enter Boston University's School of Law without college preparation, an exception apparently warranted inasmuch as he finished, three years later, third in his class. In '36 he was appointed Judge of Probate for Cumberland County, Rhode Island, and in '38 was elected to the Legislature. Pertinent to his legislative career, a newspaper has this to say: "He is a Deputy Floor Leader, and one of the finest speakers and ablest members of the Legislature; he is Chairman of the hard-working Insurance Committee." Indicative of political prestige was his candidacy, in a recent primary, for Lieutenant-Governor.

A Minnesota lad lost his sight while a high school student, and entered the school at Faribault. Graduated from there, "He has been self-supporting ever since, has continued as an expert horseman, and has trained a saddle-horse which is about as clever as a Seeing Eye dog. He has run his own riding academy."

Next, an interesting article from an Idaho newspaper: "The State School for

the Deaf and Blind is feeling justly proud over the fact that a former pupil has been named one of the outstanding young men in the United States. The United States Junior Chamber of Commerce makes an annual survey, and selects those worthy to be so listed. He was chosen because of the value of radio instruments designed for use in total darkness, of most value in times of war, when men must sometimes fly blind. When he and his brother were students at the State School in the department for the blind, they made a short-wave set from scratch. They were encouraged in every way possible, and later the Department of Rehabilitation assisted them in continuing their hobby. For several years he has been working in Omaha, where the new instruments were developed. He founded an engineering school for the blind, and teaches a class of blind veterans."

The July, '47 issue of "The Towers," Overbrook publication, gives this absorbing account of one of that school's Alumnae: "Eager to do something unique, she became interested in studying Japanese. After graduation from Columbia, she undertook to teach the English language and American ways of living to Japanese business men and merchants, if they in turn, would teach her their language. After ten years, she obtained a position in one of the high schools of Tokyo, and taught there for fourteen years. Later, she was inspired to open a school for the blind in Siam in 1939, having collected funds in the United States for this cause."

The Perkins "Lantern," under date of 9/15/47, reports:" In the mission field, Perkins has played its part. Teaching at Perkins for the past two years as an interlude caused by the War was a member of the class of '09, who, after her graduation from Wellesley College, went to China, where she opened a school for the blind."

Last, but by no means least, is this heart-warming story from the Overbrook Towers of December, '47; An alumna, class of '27, "has devoted her life to teaching the Negro blind in the deep south at Piney Woods, Miss. While a student at Overbrook, she was beloved by her fellow-students for her every-ready helpfulness and cheerful disposition. She has carried this spirit into her life at Piney Woods. No job is too menial for her if it concerns the welfare of her pupils. In the fall of 1948, when the department for the Negro blind will move to Jackson, Miss., she will become the director."

The foregoing instances were chosen from a wealth of material because they differ in kind rather than in degree. Quite as noteworthy are the success sagas of Virginia's Professor of Economics at Howard University, or Student Counselor at Washington and Lee; a Colorado dance band leader; a social worker with the Juvenile Court of Pittsburgh; the instructor of physical education in a Michigan public school; a radio program director, or boat builder, both from the Washington State School; two Batavia graduates, who respectively, are personnel director for the handicapped in one of the largest industries in the United States, and manager of the purchasing department of a large restaurant; an Indiana alumnus acclaimed a composer of major works; four erstwhile Iowa students teaching at their Alma Mater, or the North Dakotan now Superintendent of that state's school for the blind from whence he got his start; the organist in San Diego, Calif., who plays in church and at that city's largest skating rink; or the trio of Texans who teach English at the University of Michigan, Spanish at Texas U., and German at the University of Virginia—to cite only a few. Author Karsten Ohnstad and sports commentator Bob Allman are too well-known to justify more than passing men-

tion here. Moreover, let us pridefully recall that W. E. Allen, Peter Salmon, L. W. Rodenberg, Robert Irwin, Newel Perry and Francis Cummings, leaders all in their various spheres of work for the blind, are products of our residential schools!

Good old American tradition has it that, in our "land of opportunity," superior talent will almost inevitably come into its own. More than likely, those discussed thus far would have won places in the sun, whatever their beginnings. Consequently, for a more general perspective, we do well to consider that phase of the questionnaire referred to earlier, which treats of graduates as a whole. Although answers from twenty-three schools are not so all-inclusive as one might wish, they do appear to be fairly representative in that, of the twenty-three participating schools, ten are west of the Mississippi, and eight are in the south—according to the geography of the Electoral College.

During the past twenty-five years, these schools have graduated three thousand thirty-three students, of whom two thousand ninety-eight are known to be entirely self-supporting; that is juts above sixty-nine per cent. For several reasons the percentage figure is subject to upward revision:

1. Many schools did not include housewives among their self-supporting graduates. (Nowadays, what with inflation and shortages, one wonders if these resourceful souls shouldn't head the list.)

2. A goodly number of recent graduates are still in college, or elsewhere furthering their preparation.

3. Some of those finishing school in the twenty-five-year period are deceased.

4. Information on a sizable group is not available.

Incidentally, the survey excludes former students who are partially self-supporting. It is, of course, impossible accurately to weigh these additional factors; they warrant an increase of perhaps ten per cent in the reckoning.

Everyone is aware that vastly more of our former pupils have been given a chance for self-dependence in latter years, thanks to the active placement program operating well-nigh throughout the country. That is as it should be. Most universities, colleges, business and professional schools maintain employment agencies in behalf of their alumni. In the wake of the first World War, a federal employment service was tentatively launched; today, in almost all counties of every state, there is an employment office, or extension facilities, subsidized by the national government in Washington, for the benefit of any and all citizens with, or without, physical handicap. The heavy reliance of schools for the blind on our placement agencies is no cause for regret; if wailing is in order, let us bemoan the fact that such indispensable help was not to be had long, long ago.

It is sometimes argued that just about anything can be proved with statistics properly — or improperly — manipulated. The effort here has been toward an objective presentation of statistics, from which each may draw his own conclusions. However, one conclusion seems quite obvious: namely, that on the strength of factual evidence, we can derive much encouragement—encouragement, not because our jobs depend on the success of the schools, but, on the contrary, because the success of the schools is directly dependent upon our jobs. Now, encouragement is desirable primarily as a fortifying vitamin against the wear and tear of the days ahead. What about those days?

Particularly in these hectic times, only a fool or Drew Pearson will essay "predictions of things to come." Alive to unprecedented revolutionary development on all fronts, who would deny the possibility of innovations with respect to education

that could render present concepts obsolete? At the moment, there exists no practical alternative to the residential school, wih all its inadequacies, for the all-round educating of blind youth, everywhere. If and when a procedure is evolved that is manifestly superior, we of the then outmoded system will accept, nay embrace the improvement without regard for our personal well-being; to do otherwise would be unworthy of our high calling.

Meanwhile, best indication of unflagging zeal and uninterrupted progress, is a convention which can bring together 207 people from 35 states and 6 countries, willing to spend their own time and money with a view to bettering the instruction of blind school children; in terms of our numerically small profession, that is an eloquent showing. Two years ago, it was in Massachusetts; now, Texas; two years hence—well, wherever it is, a representative group will be on hand to exchange further ideas, and to renew inspiration.

Why, then, should we not look to the future with sane optimism?

The training of our students toward self-dependent, useful living now enjoys the added impetus of widespread placement facilities. This fortunate setup holds great promise, especially, if we cloistered academics have the god sense to profit from the realistic counsel of our collaborators in the field.

A philosopher once said: "Courage without knowledge is fanaticism." Stimulated by our past successes, and the wiser by reason of our past mistakes, let us continue, ladies and gentlemen, intelligently, courageously—forward!

REPORT OF THE COMMITTEE ON LEGISLATION

F. E. DAVIS, Printing House

Most of the legislation presented in Congress during the past several months has pertained to the adult blind more than to the schools. However, it is the feeling of your Legislative Committee that the schools and the American Association of Instructors of the Blind should be interested in all legislation concerning the blind. Therefore, we have been alert to legislation introduced into Congress and have had several communications among us as members of the Legislative Committee.

Probably the most recent controversial issue concerning the blind is the Executive Committee's report of the President's Committee on National Employ, the Physically Handicapped Week, which was supported by House Joint Resolutions 302 and 303 and Senate Joint Resolution 176 introduced into Congress to effectuate the principles of the President's Committee on National Employ, the Physically Handicapped Week.

The Legislative Committee of the AAIB met in Washington, April 9th, to discuss and inquire about the Executive Committee'ss report and sent the following information to the President of the AAIB on April 12, 1948:

"The activities of the Executive Committee of the President's Committee on National Employ, the Physically Handicapped Week, have been as follows:

a. The introduction of House Joint Resolutions 302 and 303 and Senate Joint Resolution 176.

b. The promotion of an Executive Order placing the coordination of activities of the Federal Government and other agen-

cies for handicapped people in the Department of Labor.

"House Joint Resolutions 302 and 303 were presented to the Congress and referred to the Committee on Appropriations in the House, and Senate Resolution 176 was referred to the Committee on Labor and Public Welfare in the Senate. We wrote the Chairman of these Committees asking that we be notified in the event hearings were to be held.

"We saw a statement signed by President Truman that he was well pleased with the agencies now handling services for the handicapped and that he would not transfer these agencies to the Department of Labor or do anything to interfere with present efficient operation of these agencies."

Your Legislative Committee took no further action at the time, but informed the President of the AAIB that we would be glad to receive instructions from him and the Executive Committee if they had any to submit. So far as your Committee knows, no hearings were held on this proposed legislation prior to the adjournment of Congress and it died without further action.

The other piece of national legislation of interest to workers for the blind was the passage of HR 6818 amending Title X of the Social Security Act relating to aid to the blind so as to provide greater encouragement to blind recipients thereunder to become self-supporting. This legislation consisted of an amendment to Clause 8 of Subsection (a) of Section 1002 of the Social Security Act and provided that "the state may, in determining the income and resources of an individual, disregard any payments not in excess of $40 received in any calendar month by an individual for services performed by him."

Your Committee respectfully submits this report for your consideration.

REPORT OF COMMITTEE OF TEACHER CERTIFICATION

F. E. DAVIS, Printing House

Total number of Certifications 1940-1946	213
Certifications from 1946-1948	62
Total Certifications to 6-10-48	275

Following is a list of those certified between 1946 and 1948:

Mabel Caroline H. Stubbs, Virginia School for the Deaf and Blind.

Muriel Miriam Gervers, New Westminster, B. C., Canada.

Ellen Martin Gilkeson, Virginia School for the Deaf and Blind.

Mildred Lucille Schorpp, Overbrook School for the Blind.

M. Blye Allan, Kentucky School for the Blind.

Lydia Scoggan, Kentucky School for the Blind.

Helen K. Hicks, Kentucky School for the Blind.

Nance C. McClaskey, Kentucky School for the Blind.

Margaret Traub, Kentucky School for the Blind.

Martha C. Schneider, Kentucky School for the Blind.

Anna E. Black, Kentucky School for the Blind.

Lula May Wash, Kentucky School for the Blind.

Molissa Lorene Taylor, Virginia School for the Deaf and Blind.

Hazel Judd, Kentucky School for the Blind.

Helen Louise Wood, Overbrook School for the Blind.

Mary E. Crenshaw, Kentucky School for the Blind.

Samuel Joel Richie, Kentucky School for the Blind.

Sarah Fay, New York Institute for the Education of the Blind.

John W. Eakes, Mississippi School for the Blind.

Mrs. Lucy A. Roberson, Mississippi School for the Blind.

Annie Kate Byrd Hart, Mississippi School for the Blind.

Eleanor Vertrees Sharp, Mississippi School for the Blind.

Anne Thomson, Mississippi School for the Blind.

Norma E. A. Idom, Mississippi School for the Blind.

Pauline Porter, Mississippi School for the Blind.

Lillian E. Bergerson, Overbrook School for the Blind.

Julia Byrd, Mississippi School for the Blind.

Annie May Denman, Mississippi School for the Blind.

Helen B. Turner, Arizona School for the Blind.

Margaret J. Maxson, Overbrook School for the Blind.

Frances Winifred Ball, Arizona School for the Blind.

Louie Elbert Idom, Mississippi School for the Blind.

Katherine Jean Leigh, Nebraska School for the Blind.

Rosetta Eunedia Bolen, Louisiana State School for the Negro Blind.

Bradley Jose Williams, Louisiana State School for the Negro Blind.

Loraine Payant, Overbrook School for the Blind.

Grace Donkersloot Napier, Royer-Greaves School for the Blind.

Marina Whitfield Alexander, Mississippi School for the Blind.

Beatrice B. May, Mississippi School for the Blind.

William Hoyt Mootz, Kentucky School for the Blind.

George Witte Cantin, Mississipi School for the Blind.

L. V. Silvis, Overbrook School for the Blind.

Alberta Lillian Sparks, Mississippi School for the Blind.

Susie Fay Kaufman, Kentucky School for the Blind.

Mildred Hay, Washington School for the Blind.

Velma B. Powers, Washington School for the Blind.

Louise Larkin, Kentucky School for the Blind.

Dorothy E. White, Overbrook School for the Blind.

Hazel M. Harsh, Washington School for the Blind.

Robert Settle Mealey, Washington School for the Blind.

Patricia Jessie Kennedy, Washington School for the Blind.

Ruth P. LeBeck, Washington School for the Blind.

Martha Frances Flanery Crockett, Washington School for the Blind.

Elnora P. Dyer, Louisiana State School for Negro Blind.

Felica Ricard, Louisiana State School for Negro Blind.

Eena Mae Smith Allen, Mississippi School for the Blind.

Paul Hyland Dubuar, Washington School for the Blind.

Jean B. Zeiler, Washington School for the Blind.

Dorothy A. Rodgers, Washington School for the Blind.

Sarah W. Davenport, Florida School for the Blind.

Clarissa M. Pickles, Florida School for the Blind.

Gussie Mae Snider, Alabama School for the Blind.

REPORT OF THE LITERARY COURSE OF STUDY AND VOCATIONAL GUIDANCE COMMITTEE

ALLAN W. SHERMAN, Perkins

Our committee presents herewith a brief report of its activities during this biennium. We have secured a lot of material, more than can be fully considered in a brief report, and have opened up many avenues which we hope a succeeding committee will wish to follow. To secure this material two questionnaires were sent out early in the spring of 1948, one to all of the schools, the other to seventy state and vocational rehabilitation agencies. Our objectives were threefold:

1. To secure statements from agencies dealing with our pupils as they enter the labor market, concerning their preparation and readiness to become contributing members of the community in which they would be living.
2. To discover the extent to which the schools were developing programs and modifying courses of study so that their pupils would receive the type of basic training needed and were receiving the benefits of modern guidance techniques.
3. To secure some information about new additions to the course of study and new methods of grouping in the elementary school.

We wish to thank the agencies particularly for their fine cooperation in completing our forms. The questionnaires were carefully filled out after much good thinking. In many cases staff conferences were held to consider the responses to our specific questions. The competency of staff members in agencies for the blind and their willingness to cooperate with the schools is, and will continue to be, a major factor in giving the greatest possible service to the former students of our schools.

We asked the agencies to state specifically what they had found to be the weaknesses of former students of schools for the blind and to make as many definite suggestions as possible for improving our methods so that we might do a better job in preparing our pupils for life experiencess.

These were the three areas felt by many who need most attention at this time.

Weaknesses of Former Pupils as Seen by Agency Personnel:

Travel skill poor.
Poor social adjustment away from school.
Bad eating habits.
Poor posture.
Poor grooming.
Lack of social experience.
Lack of work experience.
Poor attitude as shown by
- a. Unwillingness to take suggestions.
- b. Too ego-centric.
- c. Too high an opinion of own work.
- d. Unrealistic attitude in approach to job and life situations.
- e. Infantilism.
- f. Apparent lack of drive.
- g. Lack of initiative.

h. Lack of vocational planning.
i. Feeling that the blind are owed a living.
j. Poor sense of obligation.

Weak basic employment skills.
Uncorrected blindisms.
Inability to use simple tools.
Lack of practical knowledge of simple machines.
Lack of knowledge of eye condition.
Lack of hobbies.
False conception of production rate.
Insufficient amount of tangible experience.
Poor etiquette.
Poor cosmetic appearance.
Inability to sign name.
Lack of job information.
Insufficient knowledge of laws, services and the like pertaining to the blind.
Poor basic skills. (Reading, writing, figuring, spelling.)
Poor training of those going to college for learning through listening.
Girls have poor hand skill training in use of tools.

This list is probably not complete, and undoubtedly the administration and teachers of schools for the blind could add to it a considerable number of additional weaknesses. Men in the schools have always recognized the problems inherent in blindness, and have honestly and straightforwardly sought to develop pupils into well-rounded individuals capable of taking their place in a sighted world. In doing this they have fully realized that the problem is not an easy one to solve for most of their pupils. In the past it was considered that a good many of these skills could **not** be taught directly, but would develop best out of a sound academic type of program. Frankly, the emphasis is changing as it has been for the past twenty years in our nation's schools, toward a broader, somewhat less selective type of educational program, with more attention paid to the practical details of living. It is obvious that agency personnel feels that in educating blind children, this area of practical living deserves far more consideration than it has ever had in the past.

It is interesting to note that many of these weaknesses indicated by agency personnel raise problems which are not only a problem for schools and agencies for the blind to wrestle with. The May issue of the **EMPLOYMENT SERVICE REVIEW** published by the United States Department of Labor makes interesting reading on this problem. That issue has for its theme "Youth Enters the Labor Market." The problems which we face are not different in character from those faced by all schools in the country so this article tells us. The schools of the nation have still to face the problem of improving their pupils' adjustment to real life situations, of changing their basic attitudes toward work and of developing in them basic skills which will be useful to them if they are to achieve economic self-sufficiency.

Suggestions for Overcoming Weaknesses:

The suggestions made for meeting the fundamental problems of blindness indicated ranged from the simple statement "Send all blind children to public schools," to very carefully worked out essays on the improvement of specific problem areas. To relate all the suggestions would be too time consuming, although perhaps worthwhile. It might be well, however, to summarize the suggestions under three headings:

How Much Academic Training?

Agency personnels were quite definite that each individual should have a well-rounded education geared to the needs of that pupil. This will mean that pupils should not be expected to fit into a mould; and that if a choice must be made between

academic and practical training, the practical should be given the greater emphasis. Basic communication skills, they felt, were generally not too bad.

Emphasis on Broader Training for Living!

This area might well be summarized by saying that the schools should devote a larger part of their school day and their school curriculum to carrying on such experiences as will make pupils more competent in meeting the simple, practical, everyday problems of life. This would involve an enlarged concept of orientation under which might be considered travel skill, social adjustment, posture, bad eating habits, blindisms, knowledge of laws relating to the blind, and job information, among other things. The suggestions which the agencies have made in this area while not new to all of us, would indicate that they would expect the results to be far better if the schools would try to analyze the situations more carefully and then devote specific courses or develop definite techniques for meeting and giving instruction in these areas. **A careful, thorough-going plan for meeting these pupil needs should become an important vital part of the curriculum.** Many agencies suggested doing this during school time and talked rather freely about courses which would teach blind boys and girls how to eat better, but they really had few suggestions as to the particular methods and techniques which would be necessary to know if any real change were to take place. However, their point is well taken. More time should be spent in our curriculum working on these practical problems. Improvement in the areas mentioned should not be left to chance.

There is some fine work being done in many schools now on these problems. We need to know more about this good work, and we urge that more published material be made available. We urge that more material for publication be sent to the **OUTLOOK**, that more exchange, through a committee of the A.A.I.B. set up to handle such material, be made between schools. Sharing of such information and techniques of teaching will help us all to do an increasingly better job.

How Much Vocational Training?

While a few agencies indicated that schools might well give specific vocational training in certain fields, it was felt that the function of schools for the blind was to give what we would call pre-vocational training. This type of school program would include general mechanical competence with not too much emphasis on specific trades or skills. Most agency personnel feel strongly that specific trades should be acquired as adults through a period of rehabilitation between school and work life. Here we realize the tremendous importance of cooperative planning between agencies and schools. Such cooperation must be based on a well-integrated plan of guidance understood by both the schools and the agencies.

Cooperation With Agencies

From the work done by our committee we feel that there is indicated a growing tendency towards more active cooperation between agencies for the adult blind and the residential schools for the blind. These same conclusions were reached in a similar but different study conducted at Columbia University by Mr. Herbert Rusalem. In his unpublished theses **A STUDY OF GROUP GUIDANCE PROCEDURES IN RESIDENTIAL SCHOOLS FOR THE BLIND**, he finds that "there is a marked trend toward developing harmonious cooperative relationships with state rehabilitation departments and schools for the blind." The nature of this cooperation varies considerably, but there is a growing tendency to use the services provided by

state and rehabilitation agencies directly in the school program. From Mr. Rusalem's report we quote: "In some cases, schools report that rehabilitation agents are called upon to furnish current labor market information and to share in a group guidance program through conferences and consultations. Often, the testing facilities of these state agencies are employed to supplement the school guidance program. Apparently, the rehabilitation people have been active in assisting several schools in creating a more effective curriculum in occupations classes. This trend is a promising one in that these cooperative arrangements enable schools to perform more effectively in bridging the gap between the work and school environment."

We have shared our information with Mr. Rusalem and we appreciate thoroughly his fine cooperation. His conclusions in this important area of cooperation confirm those that we have made. Agency-school cooperation is tremendously important. Where careful plans for cooperative relationships have not been worked out, the schools should initiate this cooperative work. Agency personnel can be most helpful particularly in the area of vocational guidance. In this area, to discover information concerning the type of cooperative arrangement available and practiced, we placed several questions in our form. We wanted to discover the form of relationship existing between schools and agencies. It is well known that in many states the responsible agency for directing education is not the same agency which is given the responsibility for the adult blind. Of those replying to our questionnaire there were twenty-eight agencies in this category, and twenty-five where the responsibility is unitary. Where so many situations of divided responsibility exist, there would appear to be a need for establishing a very careful plan for active cooperation at this crucial point. At least one-third of the agencies replying stated that a closer relationship between school and agency was desirable. Of the nineteen reporting that a very close relationship already exists, most of these have unitary control under the same state department. Our conclusion here would be that where agencies and schools operate under the same department, closer cooperation is now more effectively organized. Where unitary responsibility is not possible, there exists a real need for developing a well-defined plan of understanding service between schools and agencies. Naturally, plans will vary with the needs and problems of the separate states.

When we consider vocational guidance and educational guidance in schools for the blind, we find that a good many of the schools are unable to maintain well-trained guidance personnel and a trained clinical testing staff for diagnostic purposes. Of the fifty-three agencies reporting, forty-six reported that well-qualified guidance officers are retained and others indicated that testing and diagnostic services were available. Some plan whereby these services would be made available to more schools would be very helpful. Several such plans are already in operation and here is a real opportunity for direct service to blind boys and girls in an effective guidance plan. This now brings us to a consideration of our next problem: Guidance programs in schools for the blind.

Guidance Programs in Schools for the Blind.

Our questionnaire forms indicated a great variety and diversity in the guidance programs carried on in schools for the blind. Many schools have well-organized programs under trained guidance counselors, while still others have very little guidance offered in their school program

because they have insufficient personnel to carry on such a program. In those schools where guidance is offered it is organized in many different ways according to the individual staff arrangement and the cooperative plan worked out with local adult agencies. Our conclusion here would be that there is a marked trend toward developing guidance programs for schools, and there is a growing tendency toward establishing close cooperation with state agencies and making use of guidance techniques and personnel available through these agencies.

In many of our schools there has been considerable experimentation with guidance techniques, and it is our feeling that this program should be started whereby all schools can share in the benefits of experience in guidance work. We, therefore, at this time shall not attempt to indicate any of the organizational plans followed or the type of programs offered, but shall recommend that this job be assigned to the next committee on guidance.

Curriculum Changes in Schools for the Blind

In our questionnaire form some attempt was made to find out what new courses had been added and old courses dropped from the curriculum in recent years. From our report it would seem that very little change in courses in schools for the blind have been made since Dr. Quimby's study of the curriculum some years ago. It was not possible through our form to find out whether there was any marked general change in emphasis in the curriculum, or whether there was a trend away from the "academic" type of program toward a more "practical" curriculum. We feel that it is safe to say that many schools are giving consideration to practical programs of training and guidance while continuing to offer the same basic academic courses which have been available for many years. There obviously is considerable experimentation going on in the schools, a fact which we feel in a very healthy sign.

Many schools are offering courses in job information and are developing libraries of Braille and printed material of vocational information for the use of both teachers and pupils. Many schools replied to our questions by saying that it is not possible to offer individual courses in vocational information or in other practical orientation subject matter, but they are including this in other courses such as social studies, economics and physical education. Several schools have added a specific course in travel techniques and report real progress in this area. Here again it would be fine if there could be more sharing of the materials taught and the techniques of teaching in these very important areas.

It was obvious from our forms that many of the schools have been alert to the need for continual reappraisal of their school program, through surveys of the area served and through follow-up studies of recent graduates. Thus an empirical basis for revision of the curriculum is being established. In this particular field there was indicated good cooperative arrangements with state agencies, but there was also indicated a need for added cooperative work in order to arrive at a firm basis for curriculum change.

New Methods of Grouping Pupils at the Elementary School Level.

Only three schools reported that they have made a radical change in grouping pupils at the elementary school level. Many more, however, indicated that they had been experimenting with new methods of establishing class groups, but that no definite plan had been worked out which could be reported on at this time.

The Ohio school has carried on for the past six years, a new method of grouping at the primary level. A similar plan was adopted recently by Perkins Institution. The Ohio plan has been in operation for a sufficient length of time for some conclusions to be drawn from it, and the indications from Perkins are that the new method is worthy of continued use. Essentially these plans attempt to provide a better learning situation where individual instruction can be given most effectively to all pupils. Mr. Hill, Principal of the Ohio School, has given us a rather complete report on his plan, part of which will be quoted here. The significant fact in both of these plans is that learning at this level is recognized as part of a growth process which is continuous, rather than at a lock-step process generally followed in the traditional elementary school plan. Mr. Hill says, "Only a plan whereby the slow learning individual can secure coaching in his most difficult subjects, and the fast learning individual is permitted to proceed at his own learning speed, can satisfactory results be secured. Individualized instruction seems to be the best answer." Under such programs the traditional grades are transplanted by learning groups. These pupils are brought together on the basis of any one of several criteria, the most common one being that of learning rate and reading ability. Mr. Hill says that promotions in such a plan are in any of the three major subjects, (number work, reading and language, which includes spelling and writing) and do not take place at the end of a school year nor at the end of a semester, but at once, whenever a pupil has met the requirements for that particular learning level. The Ohio and Perkins plans seem to be very similar in many ways although differing in important essentials. It would seem that such attempts are very profitable. and that the experience of these plans of these schools in this new method of grouping should be made available through bulletins to other schools who may be interested. Our committee recommends that further study be made in this area. Those who wish to consider such a program in the primary department in the immediate future, could well receive guidance and help from Mr. O. J. Hill, Principal of the Ohio State School for the Blind.

Standardized Tests Used in Schools.

Our committee sought to discover the intelligence and achievement tests and other measures used to find out about pupils' needs and abilities. A good many schools are using a variety of tests and other standard measures for this purpose. Unfortunately there are still a great many schools who are not now using these devices which are so helpful in properly guiding their pupils. One of the principal reasons for this is the fact that schools are unable to maintain on their staffs personnel properly trained in the use of these devices. Our committee wishes to call attention to the possibilities of cooperation with state and vocational rehabilitation agencies who in their normal programs maintain rather complete testing services.

Conclusions

1. Schools should explore very carefully the possibility of working out cooperative plans with state agencies and rehabilitation agencies. Already there is a trend toward the development of such plans, and this cooperative work should be increased.
2. The fundamental problems inherent in blindness should be continually analyzed in schools and a more direct approach should be made for their solution in all schools.
3. It is very important to utilize the ex-

perience of schools where well-planned approach has already been started.
4. Greater emphasis should be given to courses and all curricular offerings which will assist our boys and girls in the practical everyday things of life.
5. Guidance, through the entire school, is a shared process in which all staff members, students and all state agency personnel should work together. There should be even more "individuation" in school programs.
6. Two schools have given up the individual grading system at the primary level. Other schools have been offering individualized instruction to more pupils than ever before while still maintaining the grading plan. Further study of new plans of grouping at this level should be carried on.

Recommendations.

1. The responses to the questionnaires should be catalogued and a copy of the results sent to all schools and agencies who replied.
2. A new committee or a section of the present one should be formed to make a survey of plans and techniques found successful in schools, in the area of foot travel, social living, eating habits and the like.
3. We recommend that a careful study be made of attitudes and that an attempt be made to seek out causative factors for poor attitudes. In this study a beginning could be made of improved objective attempts to measure attitudes.
4. We recommend the development of bibliographies of material in guidance for use in all the schools.
5. We suggest that channels be developed for sorting out and sharing experiences of schools in all of these areas.

Respectfully submitted,

Literary Course of Study and Vocational Guidance Committee
Mr. Allan W. Sherman, Chairman, Perkins Institution.
Miss Georgielee Abel, Iowa State School.
Mr. William Heisler, Virginia State School for the Deaf and Blind.
Mr. A. B. Tacquard, Texas School for the Blind.
Mr. O. J. Hill, Ohio School for the Blind.
Mr. Paul Mitchell, New York Institute for the Instruction of the Blind.

BRAILLE COMMITTEE REPORT

PAUL J. LANGAN, Kentucky

Following the recommendation of the Braille Committee's last report, the American Printing House embossed the primary and first grade texts of The Curriculum Series Readers in grade two Braille. The cost of this project was underwritten by one of our schools which had sufficient funds in its American Printing House account to pay for the cost of the plates. As no funds are available to the Committee to carry on any such research project as this, it was necessary to solicit the aid of one of our large schools to underwrite the cost of this necessary material.

In accordance with the decision of the Braille Committee in a meeting held in Louisville, Kentucky, in March 1947 which

authorized this project, the Chairman invited all schools within a reasonable traveling distance of Louisville to send their primary or first grade teacher to a two-day seminar held at the Kentucky School in November 1947. Seven schools accepted the invitation and sent teachers at the expense of the individual schools. Here again, it was necessary to employ the interest of cooperative schools in providing transportation for their teachers. The Kentucky School furnished the quarters and maintenance for the teachers during the seminar. Teachers representing the following schools took part in the discussions: Texas, Oklahoma, Missouri, Illinois, Indiana, Ohio, Western Pennsylvania and Kentucky.

Sample copies of the material to be used in the experimental reading study were made available by the American Printing House and were on hand for the first meeting of the group. The teachers attending the meeting were offered the opportunity of expressing themselves freely in open discussion as to their personal experiences in teaching Braille to beginning children. The obstacles and difficulties were discussed and evaluated and methods of motivating reading interest were exchanged. The teachers were questioned regarding their personal opinions on the proposed plan of teaching fully contracted Braille from the beginning of the child's reading experience to eliminate the three step process involved in the current method of teaching reading. Most of the objections were the standard arguments heard in all schools—"how will it affect their spelling"—"what shall we do about writing"—"the contractions are too difficult and too numerous to be mastered by first graders." No conclusive evidence to substantiate any of these supposed insurmountable obstacles is available. No study had ever been made to prove the disadvantages of such a teaching method.

Thus, the purpose of the experiment was clearly pointed out—to prove or disprove these time-worn theories and statements. This would provide an opportunity to work on a definite program of research for the benefit of all teachers of Braille and to make an attempt to improve, if possible, on some of our out-moded teaching methods. Probably no such experiment has ever been tried in such a large number of our schools at the same time, over a period of a school year in the classroom by teachers. Slightly less than one hundred children were available in the primary grades of the schools participating voluntarily in the experiment. The results of the program to date will be of interest to many of you.

The Chairman of the Committee has taken the time (and the expense involved in traveling) to visit three of the other schools carrying on the study during the past school year. Without exception the teachers were all very enthusiastic over the progress of their classes. No unusual difficulty was encountered that has not been met before in teaching the other forms of Braille. In fact, the statement was made by two of the teachers that the method not only seemed to be easily mastered by the good and average readers, but it seemed to make the reading process less difficult for the slow-learner or the poor reader.

Though no attempt will be made here to present any conclusions based on the results of this first years' study other than the favorable response of the teachers themselves who are, after all, doing the work, but rather a request and a recommendation will be submitted, as is customary by our Committees. It is the feeling of those concerned with this project that the program should be continued for the next two school years in order

that more time might be devoted to the study of the children subjected to the procedure this year. In order to do this funds must be made available to the American Printing House to pay for the cost of embossing the textbooks of the second and third grades in full grade two Braille. This expense can readily be eliminated by the cooperation of two or three of our large schools with unexpended funds remaining to their credit in their regular Printing House accounts. If the books are not sponsored in this manner, some of the schools with smaller allotments at the Printing House may be prohibited from continuing in the study because of the added cost of the plates to the regular edition costs of the texts.

The Committee is happy to have had the opportunity of serving the Association in the inauguration of this project, and the above report of our activities is submitted for your consideration.

REPORT OF THE AMERICAN PRINTING HOUSE FOR THE BLIND

F. E. DAVIS, Superintendent

At each Convention of this Association, the Superintendent of the American Printing House for the Blind is called upon to give a report of the activities of the institution for the preceding two-year period, with a possible preview of forthcoming events. In preceding years, you have had noteworthy reports from the late A. C. Ellis. At this time I should like to pay tribute to his seventeen years of service to the Printing House and to the schools and classes for the blind. From a small plant of approximately 50 employees, manufacturing small quantities of Braille books and slates, the institution grew under his leadership to a point where we now have over 150 employees, publish books in Braille, Talking Book and large type form, manufacture all types of tangible apparatus, and issue 35 Braille and Talking Book magazines for the blind on a regular schedule. It was through his efforts that The Reader's Digest Fund for the Blind was developed to provide free Braille and Talking Book editions of The Digest to all who want to read them. It has been a very great disappointment to all who knew him that he did not live to see the realization of our fine new building for which he drew up the plans and worked so hard to obtain funds. His contributions to the Printing House were many and outstanding, and he will be long remembered in all work for the blind.

January 23rd of this year marked the Ninetieth Anniversary of the founding of the American Printing House for the Blind. It is the oldest national agency in the United States devoted exclusively to work for the blind and the largest publishing house for the blind in the world. Inasmuch as its founding was the outgrowth of the need for instructional materials in our schools for the blind, and because the development to its present position of leadership in our field has been part and parcel of the growth of our educational institutions, it would seem that a review at this time of the history, purposes and policies of the Printing House would be of benefit to us all.

The Kentucky School for the Blind, founded in 1843, was the third state school for the blind to be established. Like all of the early schools, it was soon confronted with a complete lack of embossed books

and educational devices for instructional purposes. The creation of a small printshop in the basement of the Kentucky School, therefore, was the actual beginning of the Printing House. As other schools for the blind were established, they, too, needed books and tangible apparatus, and so the Trustees of the Kentucky School founded in 1856 a separate, national, non-profit printing house which could meet the combined demands of all of the schools and institutions.

For twenty years after its incorporation, the Printing House supplied its materials on a cash basis and through funds raised from private philanthropy in several of the states. During the Civil War, monies secured from private donations were cut off, demonstrating the need for a more adequate — and permanent — source of funds for books and appliances for all of the schools. The 1878 Convention of this Association (AAIB), after due and deliberate investigation and consideration, memorialized Congress for an appropriation to provide the schools for the blind with educational materials to be manufactured at the American Printing House for the Blind. As a result, in 1879, the Federal Act "To Promote the Education of the Blind" was passed. The original appropriation, which was authorized in perpetuity, amounted to $10,000 annually. In those early years, the total enrollments of the schools amounted to only a little over 2,000 pupils. Subsequently, as our blind school populations increased (they now total approximately 6,000 students), and new methods of education required greater and more diversified materials, the appropriation was increased from time to time until it now amounts to $125,000 annually, including the $10,000 permanent appropriation.

The seven members of the Board of the Kentucky School who founded the Printing House comprised its original Board of Trustees, and the first Superintendent of the Institution was also Superintendent of the School. In setting up the Federal appropriation, Congress required that the superintendents of the schools for the blind in several states and territories of the United States be made ex-Officio Trustees of the Printing House, to act as agents of the Federal Government in the management of the affairs of the institution. The Board of Trustees of the Printing House, therefore, is now composed of seven citizens of Louisville, Kentucky, (successors in office to the original incorporators), and ex-officio all of the superintendents of the schools for the blind, or superintendents of public instruction of city school systems providing day school classes for the blind, throughout the country. The local Board of seven members constitutes an Executive Committee which acts for the whole Board in the interim between Annual Meetings. All of the six Superintendents of the institution during its ninety years of existence have come from the ranks of the superintendents of the schools for the blind.

Both the State and Federal Charters require that each year recommendations be requested from the several states, particularly from the schools and classes for the blind under the Federal authorization, for books and materials to be manufactured and made available through the Printing House. A Publications Committee, consisting of five ex-Officio Trustees, elected biennially, directs this provision of our activities. From the recommendations received, the Publications Committee is required to select for production those books and appliances for which there is the greatest demand. Further, the Committee makes recommendations and suggestions as to the manner and style in which books are produced conducts surveys of the need for special devices and materials and otherwise works closely

with the Superintendent of the Printing House in making available to the schools the articles which they need for the education of the blind students under their care. All policies of the institution must be approved by the whole Board of Trustees.

The Federal Act required that, on the first Monday in January of each year, the Superintendent of the American Printing House for the Blind shall obtain from the superintendents of the schools and classes for the blind a registration of the number of blind pupils they have enrolled and under instruction with materials provided by the Printing House on that date. The definition of blindness which has been adopted for this purpose is:

> Central visual acuity of 20/200 or less in the better eye with correcting glasses, or a peripheral field so contracted that the widest diameter of such field subtends an angular distance no greater than 20 degrees.

The enrollments so registered are used to determine the per capita quota allotments for the following fiscal year (July 1-June 30) to the individual schools and classes. These quota allocations do not consist of cash payments to the schools for the blind, but are in the form of credits on the books of the Printing House which must be used in the purchase of books, tangible apparatus, and other materials which are "manufactured at" the American Printing House for the Blind. The actual Federal monies themselves are paid over semi-annually to the Treasurer of the institution and, by law, must be used for the purchase of raw materials and the payment of salaries for the manufacture of books and apparatus to the order of the schools and classes for the blind. It is not possible for the Printing House to purchase supplies, such as paper, furniture, etc., and then reissue them to the schools and classes on quota allotments without first processing them to a very considerable degree.

The quota allocations to the individual schools and classes are made on July 1st of each year and cover the allotments for the entire fiscal year July 1-June 30. It is against these credit allocations that the schools authorize the shipment of books and materials to their respective institutions. Cash payments by the schools are also accepted.

In addition to its services to the schools, the Printing House, as a non-profit, private, national institution has also always extended the facilities of its plant to private individuals and other agencies which wish to provide at cost or less books and materials to all of the blind. Records show that as early as 1883, The Society for Providing Evangelical Religious Literature for the Blind commissioned the Printing House to publish and distribute to the various institutions for the blind THE DAIRYMAN'S DAUGHTER in both line letter and point types, also the International Weekly Sunday School Lessons. This Society was the forerunner of what is now the John Milton Society for which the Printing House publishes the Discovery and John Milton Magazines and a number of books each year. In 1887, the first volume of THE BIBLE—"Psalms" in New York Point—was issued to the order of the American Bible Society. Thousands of volumes of THE BIBLE are now printed annually for this agency, including two editions in Braille grade 1½ and one in grade 2 and odd volumes in foreign languages such as Spanish and Portuguese. We are proud to report that the scope of our work has been wide and varied. THE MORMON BIBLE was embossed and printed at the Printing House for the Mormon Church, THE HEBREW BIBLE in Hebrew Braille is now being published for the Jewish Braille Institute of Amer-

ica, and last summer several small books in Polish Braille were printed for the Junior Red Cross to be given to the Laski Institute in Warsaw. The number of titles published to the order of the Library of Congress, for free circulation to the adult blind of this country through the regional circulating libraries, runs into the thousands. The number of our magazine publications now totals 35 in Braille and Talking Book form. All of these books and materials are supplied under contract and are manufactured in accordance with the specifications required by the contracting agency. All materials, whether for the schools or for other agencies or individuals, are supplied at actual cost, and our prices are kept to a minimum commensurate with good materials and workmanship.

Because the growth of the Printing House has not only paralleled, but has been completely interwoven with the development of the educational and literary phases of work for the blind, it has also been subjected to all of their vicissitudes. Prior to 1918, and the adoption of Revised Braille Grade 1½ for this country, it was often necessary to duplicate many titles in at least three or more types—New York Point, American Braille, English Braille, and even Boston Line Letter. When the battle of the types was over, the Printing House was forced to discard not only thousands of usable plates in the obsolete types, but the machinery and equipment with which to manufacture them as well. This was also true when inter-point Braille replaced one-side printing. Then, just as a representative catalog of grade 1½ books had been built up, Standard English Braille Grade 2 was adopted in 1932, and many of our plates were again rendered obsolete because our readers became used to the more advanced system. When the Talking Book was developed, the Printing House was called upon to establish a new department for the manufacture of this type of publication. And now we are at the threshold of another new method of publishing—large print. It is, however, the purpose of the American Printing House for the Blind to provide, if at all possible, anything that may be needed in the way of literature for the blind and near blind, whatever may be the method of reproduction required. Further, the manufacture of any and all types of special mechanical devices, such as slates, maps, writers, etc., on a non-commercial basis specifically for the use of the blind, is also within the province of the Printing House. The recent completion of our new building unit makes possible the expansion of our facilities for the manufacture of such equipment in the not too distant future.

This review of the history, purposes, and policies of the American Printing House for the Blind has been designed to acquaint you with the background of our program of activities, and to give you some understanding of the policies of the institution. As the official schoolbook printery for the United States and its territories, its first duty is to provide books and apparatus for the schools and classes for the blind as they may need. As a national, non-profit agency for the blind, it is its purpose to cooperate with all worthwhile projects for the provision of literature and appliances for the blind and near-blind, by offering our facilities, including plant, personnel and experienced "know-how," to everyone, schools and others alike, it is our duty to develop and maintain our plant, equipment, and personnel, to the end that the scope of our activities may meet the needs that arise and the materials we manufacture may be as high in quality and low in price as is possible.

In closing, I want to thank the superintendents, librarians, and teachers of our

schools and classes for their fine spirit of cooperation. It has made my introduction as Superintendent of the Printing House most pleasant. The completion of the new building unit, the purchase of additional equipment, and the fact that we have a most efficient staff and personnel for production, should all contribute to increased services to the schools in the months to come.

TEXTBOOK NEEDS OF THE SCHOOLS FOR THE BLIND

By
EGBERT N. PEELER, North Carolina

The public schools throughout this great country of ours operate under a set of guiding principles commonly referred to as the course of study. Each state has its own course of study and many cities and counties have courses of study to supplement the State course of study. Theoretically, the course of study outlines the goals to be attained during the course of instruction for particular classes. It may also list many of the methods to be used in reaching the desired goals. The courses of study in use throughout the United States vary somewhat in their general nature, depending upon the locality and the needs of the people, but there is a vast amount of uniformity throughout the country.

The course of study outlines the goals to be met in the public schools and textbooks are adopted on the basis of these goals. There must be an organized, integrated progression from year to year to produce, at the end of a specified period, a well rounded, well educated individual. It is proper that we should say that textbooks should be adopted after the course of study is completed. It would be better if we could write textbooks in accordance with the specific needs as outlined in the course of study but as a general rule this cannot be done. In actual practice it is usually necessary to adopt certain textbooks that may be available although they may differ somewhat from the course of study.

Sometimes our public school friends conduct a nation-wide study of a particular subject, such as English or science. At the end of this nation-wide exhaustive study a publication will be submitted to the American people bearing the recommendations of the nation-wide group regarding the teaching of this subject. After a study of this kind is completed, it is quite customary for publishing houses to employ specialists in that field to write a series of textbooks exactly in accordance with the reports of the national study. These textbooks then are presented to the public schools and are adopted and used, even though they may not fit in the individual courses of study of the many states. The schools for the blind have very little opportunity to write exhaustive courses of study. We must depend upon the public schools for guidance in this field. We have to adapt their courses of study to our needs, of course, and we should do it to as great an extent as possible.

We must face the fact, however, that, like many of the public schools, the textbook is ultimately our course of study. If the textbook must be our course of study, then it is highly important that we have the right kind of textbooks to offer to each child for each course . Sometimes teachers depart from the course of study and from the textbooks to promote a particular subject or a particular unit of

study which is interesting to them. One of the best illustrations of this is the annual custom of studying Indians around Thanksgiving times. Indians and pilgrims are picturesque people and it is very easy for teachers to build up interest by having their art classes and reading classes focused on the study of these people. Some years ago in the State of North Carolina there was a great deal of discussion throughout the schools of the state about the fact that practically all elementary teachers were taking out time to teach about pilgrims and Indians at Thanksgiving time whereas the course of study actually designated that this subject was to be covered thoroughly by the third grade teacher only.

Basal Textbooks

On the next page you will find a chart which shows the grades in which formal textbooks are generally used. This is marked CHART NO. 1. There would be some variation in this chart if we were to compare it with the courses of study of all of the states but in general the pattern shown here would fit the entire nation. You will notice that reading is listed as a formal textbook subject in grades one to six, with a question mark in seven and eight. Some states operate on an eight-four plan, others use the six-three-three. The use of reading matter in the seventh and eighth grades would depend upon the course of study as set-up locally.

Formal textbooks are needed for English in grades three through eight. You may say that they are also used in the first and second grades. This is true to a limited extent. As a general rule the textbooks in the first and second grades are little more than statements of play activities in which the children may participate. The same thing is true with arithmetic. Arithmetic is taught in the first and second grades, of course: But as a rule this is limited to very simple number work and a textbook is not essential. The first formal textbooks are found in the third grade.

In the field of geography you find formal instruction beginning with the fourth grade. In the field of history it begins in the fifth grade. On chart No. 1 you will find specific subjects listed for the geography and history in each grade. The fourth grade geography is sometimes referred to as travel geography. In this subject the children are introduced to home-life in many lands. They do not study the geography as you and I think of it as adults, but they try to find out how people live in other lands that are cold or hot or damp or dry. Fifth grade geography is almost universally United States geography. Also United States history is generally taught in the fifth grade. The geography books offered in the sixth and seventh grades will vary some, depending upon the publisher producing the books and the courses of study of the several states but in general they must cover all of the continents except the United States or the North American continent. The sixth grade history is one which deals with our backgrounds in the old country. It is really a world history written in simple language and simple concepts for young children. It tells about the early developments in Europe and Asia and covers the centuries down to the discovery of the western hemisphere. This opens up the way for the study again of the United States History in the seventh grade.

Several years ago while a course of study was being written in North Carolina an effort was made by the Committee on Social Studies to rearrange the geography subjects in the sixth and seventh grades. At that time the eighth grade was not receiving much geography instruction and this particular committee wanted to

CHART NO. I

Basal Subjects	Grades in Which Formal Textbooks Are Generally Used							
	1	2	3	4	5	6	7	8
Reading	yes	yes	yes	yes	yes	yes	?	?
English			yes	yes	yes	yes	yes	yes
Arithmetic			yes	yes	yes	yes	yes	yes
Geography				Home life in other lands	United States	Europe and Asia	Southern Continents	?
History					United States	Old world countries	United States	Local state history
Health			yes	yes	yes	yes	yes	yes
Spelling		yes	yes	yes	yes	yes	?	?
Writing	yes	yes	yes	yes	yes	yes		
Art	yes	yes	yes	yes	yes	yes		
Music		?	yes	yes	yes	yes		

move a portion of the geography work to the eighth grade, that is, they wanted to divide up the offerings in the sixth and seventh grades between the sixth, seventh and eighth grades. The work was properly divided in accordance with the wishes of the committee but before the report was finished it was discovered that not a single publishing house produced a series of geographies which divided the work between these three grades in accordance with the manner desired in North Carolina. This meant that the committee was forced to change its recommendations or to have a series of textbooks published.

You will notice that United States History is taught in the fifth grade along with United States Geography. This is almost a nation-wide practice and since this is a universal procedure publishing houses have been liberal in the preparation of textbooks to fit these two subjects for fifth grade children. Because of this custom we are almost compelled to offer these subjects for our fifth grade children. If we were to offer them for the fourth grade the books would be too difficult. If we moved them up to the sixth or seventh grades we might find them too easy.

In the schools for the blind we, of course, are fully dependent upon the public schools for the development of our textbook material. Since we are also limited in the number of textbooks that can be put into Braille, it is essential that we adopt or select books with extreme care. There may be a dozen publishing houses in the United States that publish series of elementary arithmetic books. How can we be assured that we will get the best of those series? There may be twenty publishing houses with series of elementary English books. We cannot get the best of those series unless we have a good method of selecting them.

In general, perhaps we would say that the books that are the most successful in the public schools would be the best one for us to adopt. If we follow this practice we may get some very good books but it would be necessary for us to accept books that are at least five, six or seven years old because it would take this long for any series of books to be proven in the public schools.

If we emboss the most recent books that have been produced by the publishing houses we take a chance on getting some books that will not be successful in the public schools after they have had a fair trial.

In selecting books to be embossed it seems to me that there should be some way of getting a ballot from all of the schools to determine which books need to be replaced. We should have some way of determining which subject fields need to have new material. If we were to send a questionnaire to the various schools from time to time to ask for opinions regarding the usefulness of a particular English series or a particular history series the results received from these ballots would help us to know which books should be changed and the time for making the adoptions of new series.

The selection of new material could also be improved a great deal if it could be placed on a schedule and a formal announcement made well in advance of the time for adoptions to be made. For example, if we knew now that there would be a new series of health books adopted and embossed in the spring of nineteen hundred forty-nine it would give us the next nine months to study health books in order to arrive at a decision as to the one desired. Perhaps it could also be announced that a series of history books would be adopted in the spring of nineteen hundred fifty and a series of geography books in nineteen hundred fifty-one. With this schedule well in advance it would be possible for all of us to study

any series of textbooks that may be available to us with the hope that a good decision would be made regarding the final selection for embossing.

We are inclined to depend to a large extent upon the public schools for guidance in textbook matters. We, of course, would like to know which textbooks are the most popular and the most useful in the public schools. This raises the question as to how we could get this type of information. It would be available in varying ways from all of our states. Practically all of the states have some method of adopting or selecting textbooks and through this means we would be able to determine which textbooks would be the most useful and the most practical. About one-half of the states adopt textbooks on a state-wide basis. As a general rule committees of teachers, principals and superintendents are appointed to examine all of the books within a specific subject field. After studying these books from three to six months the committee is asked to make a report or a recommendation. If they happen to be studying the field of science and find that there are twelve series of science textbooks available in the United States they will examine all of them and come out with a report listing the three or four series that they consider the best. A similar study in another state may not bring the same report. Perhaps the same three or four series of books would not be listed in both states but there would be enough uniformity that we could be guided by the action of several states if we could get their results and compare them. Many of the states do not have state adoptions but they have methods of selecting and listing books and through the State Education authority it would be possible to get advice at any time regarding the most popular and the most useful series of books in the state.

Supplementary Readers

Supplementary readers are playing a great part in the teaching program of our schools today. This is true in the public schools and in the schools for the blind. Perhaps when you went to school there was only one reader in each grade. When you finished your reader you started back at the beginning and went through it again. We know, of course, that a great many changes have taken place since that practice was followed. Today the supplementary reader carries with it not only a means of teaching reading and the development of the love of reading but it also possesses a great deal of factual material to help supplement all of the courses offered in the curriculum.

On chart No. 2, you will find a statement of a number of different types of readers as they are used in the public schools today. This list could be made much larger but for our use I think the items listed will be sufficient. You will notice that the page starts with basal and work type readers. This is the type of book which serves as the backbone for all reading instruction. Basal books or work type books are always planned, word by word, from the beginning to the end. We have a very carefully selected word list and a continuous repetition of words in each book. The pre-primers, primers, first readers, second readers and third readers in particular are very carefully checked to see that no words are used that are beyond the ability and understanding of the children in those grades. The careful grading of the words, the concepts, and the material in general makes it possible for a child to progress from one book to another without any disturbing barricades.

Basal and work type books are designed to teach the skills of reading. Children must be taught to analyze their sentences, to analyze their paragraphs, to find topic

CHART NO. II

Type of Reader	Grades in Which the Types of Readers are Generally Used							
	1	2	3	4	5	6	7	8
Basal and Work Type	yes 34 22	yes	yes 10 6	yes	yes 3 2	yes		
Literary	yes 6 10	yes	yes 2 4	yes	yes 1 2	yes	yes	yes
Geography			yes	yes	yes 1 2	yes	yes	
History				yes	yes 2	yes	yes	
Civics and Citizenship	yes 5 6	yes	yes 1 1	yes	yes 2 1	yes	yes	yes
Biography					yes 1	yes	yes	
Indians		yes	yes 2	yes				
Industries and Occupations						yes	yes	yes
Science	yes 1 4	yes	yes 1 2	yes	yes 1 1	yes	yes	yes
Music Appreciation	yes 1	yes	yes 1	yes	yes 1	yes		
Art Appreciation	yes	yes	yes	yes	yes	yes		
Health and Safety	yes 4 6	yes	yes 3 2	yes	yes 1 1	yes	yes	yes

sentences. They must be taught to read one article or story fast. Another should be read very slowly. We read a recipe or an arithmetic problem very carefully but we read a newspaper article very fast. After the proceedings of the AAIB Meeting are printed and distributed for the benefit of those who did not get to come to this meeting, someone may want to read my speech. If he does he is going to try to pick out of each paragraph the one sentence which gives all of the meat that is in that paragraph so that he will not have to read the whole speech. This is a reading skill. You and I read a great many things from time to time in which we want to get the central thought but we do not want to read all of the passages. We want to get the wheat without bothering with the chaff. There are many types of reading skills, in fact, about twenty of them have been classified. Basal and work type readers should teach the skills of reading.

Next to basal and work type we have literary readers. These readers are very important in the classroom. They represent an effort to teach the children to love literature. In the lower grades we find in the literary readers such gems as The Three Bears, Little Red Riding Hood and many other favorite stories that have been handed down for many generations. Children read these stories not because they expect to get any particular reading skills but because they love the story. They read because reading is pleasure. Without this type of reader it is difficult for us to encourage our children to read purely for the joy of it and of course unless they learn to read for the pleasure they get from it they will never be great readers.

There are many other types of readers shown on Chart No. 2. We have geography, history, civics and citizenship, biography, Indians, industries and occupations, science, music appreciation, art appreciation, and health and safety. Some of these are very useful for all grades but some of them are needed only in the upper grades and a few only in the lower grades. Books on civics and citizenship try to teach the children the general principles of living with each other—how to take turns — how to be good neighbors. This is very important material. We need science readers all the way through our grades. Perhaps the subject of science should have been listed on Chart No. 1. Some states offer science as a basal subject, others do not. If it is not offered as a basal subject it must be covered in the course of study through the use of supplementary readers.

Health is another very important subject which must be taught throughout the grades. You will notice on Chart No. 2 that geography books are listed in grades three, four, five, six and seven. History boks are listed in grades four, five, six, and seven. There is a close correlation between the use of supplementary readers in these grades and the use of basal textbooks as shown on Chart No. 1. Chart No. 1 shows the beginning of geography instruction in the fourth grade but it should really be started in the third grade by the use of supplementary readers which are very simple in nature. They should tell how children live in other lands, the types and kinds of games that they play, the kind of clothes that they wear, and the kind of houses that they live in. How do they keep warm? What kind of food do they have? All of this is very simple material and can be presented in story form as an introduction to formal geography in the fourth grade. In a like manner, if history is started in the fifth grade it can be introduced in the fourth grade through the use of supplementary readers. These readers should tell the children something about how our people lived in

colonial times. They should tell about life in the south before the war. They should tell about how people crossed the Appalachian Mountains and the rivers and the plains to get into the western part of our country. These books should be easy but they should be pleasant and entertaining in order to give the child an introduction to the history that is coming later.

On Chart No. 2 you will notice some figures that have been entered in the first grade, the third grade and the fifth grade. The figures on the left represent the number of sets of readers in use at the North Carolina School for the Blind. The figures on the right of each grade represent the number of readers that I think should be used at the North Carolina School. Let's analyze these figures briefly. In the first grade for basal and work type readers you will notice that we have to total of thirty-four readers. I am suggesting that we should use twenty-two. These are basal and work type readers and represent the pre-primers, primers and first readers. Some of them are used in our first grade and others are used in the kindergarten. This represents a noticeable reduction in the number of books of this type, but you will notice that I have recommended an increase in other types of books. I am recommending an increase from six to ten books in the literary field. That is, I think the children should have more books that they can read just for the love of having the story. They must finish up their kindergarten and their first grade reading with a real love for reading. They get it through these books. You will notice that I recommended an increase in science, from one up to four books. In health and safety from four up to six books.

Now let's look at the third grade. Here again you will find the same trend. A reduction in the number of basal and work type books, an increase in literary books from two to four, with a recommendation of two books on Indians, and an increase in science. Note that one book in music appreciation is suggested for each grade.

In the fifth grade we have another reduction in basal and work type books. By this time most of the children have learned about all of the skills in reading they are going to be able to get. From now on they need more practice in order to develop speed. The fifth grade pupils are taking a great many subjects. If you will look on Chart No. 1 you will find that they are now taking English, arithmetic, geography, history, health, spelling, etc. Therefore we should have supplementary readers that will help to enrich every subject taught in the fifth grade. In the fifth grade in North Carolina we have only one book in geography that would help supplement the basal book in geography. I am recommending that we have two. I am recommending that we have two books in history. You will recall that we are teaching United States History in the fifth grade. If we are to have two readers in this grade, would it not be nice to have one which tells something about life on a plantation in Virginia about the year 1775. Another could tell about a boy who traveled with Lewis and Clark in their expedition into the northwest. If the story is written for boys and girls they will enjoy reading this type of book and it will add a great deal of interest to the dry textbook which must be used for their formal study of this subject.

Summary

In summarizing these remarks I would like to suggest a few recommendations that I think would help us in having the best possible textbooks for our students in the schools for the blind. First of all, I think we need some method of reporting to the printing house or to the prochanged in our schools. We need to have

some method of arriving at a decision as per authority the books which need to be to the books that are obsolete or worn out in our schools and should be replaced by new selections. This should be done cooperatively, on a nation-wide basis. After it is determined that a new selection should be made in a specific field I think we should have some way of examining prospective selections from among the books that are available in the United States. I think we should have some way of getting recommendations from the public schools regarding the efficiency, the usefulness, the attractiveness of the books that are in use. After getting information from the public schools and studying the books ourselves a method should be devised for making the final selection of books which shall be embossed for use in the schools for the blind.

Chart No. 2 shows that a major portion of the supplementary readers that have been made available have been of the basal and work type. These are the best books that can be found in America but in order to offer a wide variety of material to our students it is necessary for us to have a well-balanced list of supplementary readers. I would therefore like to recommend that we arrange for some method of analyzing the needs of the schools and for selecting and embossing the types of readers which will help to supplement and enrich every subject now offered to our boys and girls.

In addition to these suggestions, I would like to make one more which on the surface may not seem to be so important. Yet I think it will be very serviceable to us. I would like to recommend that the publication of the printing house which gives the list of all embossed textbooks be changed and that all textbooks be listed under the names of their particular field, that is, all of the arithmetic books be listed under the heading "Arithmetic" and all of the health books be listed under the heading of "Health"; that all of the geography books be listed under a heading called "Geography" and that all of these books be separated from the library books which have no direct classroom application. In a like manner the supplementary readers could be listed under the various types of readers as outlined under Chart No. 2 or in accordance with any other classification of books that may be agreed upon. This will help us to select textbooks and readers without being confused by the library books and library classifications.

A PRACTICAL PROGRAM OF SOCIALIZATION

By
J. M. WOOLLY, Arkansas

My assigned topic is A Practical Program of Socialization. I am sure all of us are well aware of the necessity for a socializing program for the youngsters who are entrusted to us for educating. Everyone who has been in work for the blind very long can call to mind graduates and former pupils of whom they are ashamed because of their atrocious social behavior. This is not entirely their fault but resulted from our shortcomings, when we did very little except academic and vocational teaching.

We all know that an academic education plus some vocational skill or skills is worth very little to our boys and girls unless they are socially acceptable to sighted society in general, and specifically

to an employer and co-workers in the vocation at which they are employed.

A socializing program can not be successful unless the teaching staff of the school is vitally interested in, and concerned with, such a program. Every staff member whether he be a vocational teacher, an academic teacher, a music teacher, dietitian or what not, must be prepared to lend a hand if the socialization program is to show results.

Secondly, the student body must be sold on the program. Much extra time is, of necessity, demanded of students. If they are not convinced of the value of learning the things which they have missed through not having had sight during their formative years their cooperation will be passive at the least, and perhaps a feeling of resentment could grow up, which could easily cause the program to do damage rather than produce desired results.

It seems to me that our best method of combating those who would abolish schools for the blind is to turn our boys and girls who are better educated, have better vocational skills, and last, but by no means least, have better social behavior than those youngsters who are educated in the public schools. That is a big job since any socialization program must replace that which the child should have gotten in the home.

We approach the socialization problem by having a faculty committee which guides our program during the year. This committee is composed of the principal and three teachers who we feel have an understanding of the various needs and methods of approach.

During the few years we have devoted time to a tangible program we feel that our boys and girls have become much better adjusted to living and working with sighted people. The idea for the Adult Adjustment Center in Little Rock which is sponsored by the Lions Clubs of Arkansas came from our efforts and is patterned somewhat along our lines of endeavor. Of course, they may be able to go much further than we, since they bring in adults for that training only. Also, they attempt to handle only a few at a time so an individual teaching plan can be followed. Schools, on the other hand, must provide academic and vocational education primarily, and socialization as a secondary program.

Mobility has been greatly improved since our program started. Prior to that time our boys and girls were given no help in learning to go where they wanted to go and many stayed home rather than risk embarrassment due to a poor ability to get around. Now most of them go where they want to unaided by sighted help, other than incidental help which may present itself during the trip. At the beginning of each year each high school pupil is provided a white cane if he does not have one and if his vision is poor enough to justify its use. They are then assigned to a teacher for instruction in mobility. Each teacher may have from three to four pupils with whom he works from time to time. The activity period, noon hour, or after school may be devoted to mobility instruction. This is worked out by the teacher and pupil to their best advantage. The teaching process includes posture, methods of handling a cane, uses of a cane, short trips around the campus, in the neighborhood, how to board public conveyances, and finally trips all over town first accompanied by the teacher and then on his own, going to places designated by the teacher. This type of work is continued until it is felt that the individual can go most anywhere he would be called on to go, unassisted. This sometimes takes more than one year, naturally. I think of one boy who in two or three years time, never became very proficient, yet he did conquer an unreasonable fear of

traveling alone and was able to go about town fairly well. We are planning now, a series of movable flaps suspended freely on wire to try to develop facial vision. This will be an important asset to our totally blind people if the facial vision can be developed, to a tangible degree. These flaps will be two feet or so in width and somewhat longer and mounted so that they may be moved to prevent memorizing position. To begin the pupil will stand and the flap will be moved toward him until he feels the concussion of air. After he is well aware of this pressure he will walk toward the shield until he begins to develop enough sensitivity to recognize that there is an object in front of him. Following this procedure practice for a period of time will probably be necessary.

A few fundamentals which we stress in developing mobility among our pupils are: Posture, which I have already mentioned but which cannot be stressed too much, since good posture determines ability to keep in a straight line; the ability to relax; the right use of a cane, which should be a fishing like motion rather than a pecking or crutch like use; and finally, to use sounds and odors to facilitate their mobility.

Table manners have shown a great improvement, and continue to hold that level of advancement. We have accomplished what we have, by several means. A repetition each year of a basic course in table etiquette for all pupils, taught by the home economics teacher, has not proven boresome, nor produced any ill effects through repetition. On the contrary, pupils seem to look forward to it each year. Also, mixing boys and girls at each table in the dining room, has produced a consciousness that is very worth while. Six boys and girls sit at each table, one serving as host or hostess for a period of time. The dietitian and home economics teacher work very closely together on this problem in that the dietitian spends most of the meal time circulating about the dining room making any corrections in table etiquette which may be needed.

Dancing is taught most every year for new pupils and others who are slow. We have found that it is an aid to mobility as well as being a social grace which everyone needs if he is to be a part of normal society. Student dances are given at festive occasions during the year as well as several other times each semester.

We want the life of pupils while on the campus, nine months of each year, to be as normal as possible. Dating is permissible, in fact, encouraged at all social functions. Telephones are available for both boys' and girls' use, for making dates. The aim is to make the life of pupils as near as possible like that of any other boy or girl in this country. As to whether that would be a normal life I am not prepared to say. At any rate, that is what we use as a guide.

Boys, of course, may leave the campus at any time during the day when they have no classes. Girls, on the other hand may leave only after classes are over in the afternoon and on Saturday and Sunday afternoons. Boys and girls are not permitted to leave the campus together unchaperoned.

However, we hope the continued good conduct and cooperation on the part of the pupils will merit the adoption of this sensible policy.

In the five and one half years in which we have been actively engaged in a program of socialization we have taught many units. Some of these have been worth repeating, others we found had little value or perhaps such an intangible nature as to be very difficult to teach. Those we have dropped and not attempted to repeat. There are several, however, such as table eiquette, dancing, etc., which

are repeated year after year since they are skills which need constant attention if we are to attain near perfection.

Units which we have taught from time to time and which we consider worth while are: introductions; blindisms; problems of the parttially sighted; travel problems in connection with travel on public conveyances; personal appearances, which, by the way, is a unit which is repeated often and one which has given most gratifying results; personality development, which is perhaps intangible to some extent, but can be of a great deal of value; boy and girl relationships; games of all kinds, both active and party games; and correct use of the telephone.

I have attempted to go into some detail on some of the units which we have taught. Others, I have merely listed. The ones I have detailed may not be the most important by any means. In fact, in any given school, conditions change from year to year so that the thing which seemed important this year may be overcome and be needed very little next year. That prompts me to say that socialization may vary greatly over the country and in some schools not be needed at all. However, I would say that the boys and girls we get, small and large, need many of the social graces which we are attempting to develop. We have not been able to reach lower than the fifth grade in our efforts. However, we are now planning to alleviate, we hope, the need for some of what we do with the upper elementary grades and the junior-senior high school group by teaching many of these same units, in different forms and by use of different methods in the lower elementary grades. Of course there will probably always be those who come into school after having been in public school or who have been out of school several years who will need much attention.

The activity period which is scheduled in the middle of the morning is not the only time devoted to social adjustment. Pupils are given their choice of churches which they will attend for both Sunday School and Church each Sunday morning. Game parties are held frequently and as I said before, dances are not too infrequent, and teas and other social gatherings such as picnics, clubs, skating parties, radio parties, concerts and movies are held on and off the campus. At all such activities members of the staff are present and later call the attention of the pupil to any breach of etiquette which may have been observed.

In conclusion, I would say that our program calls for much additional work from the staff but they seem to enjoy it and enter wholeheartedly into it. This comes about because of the great improvement we see in our graduates and the many comments we hear from people in work for the blind, especially, placement agents, counselors, etc., who say that our graduates are much easier to place now and that a higher percentage are succeeding in their field of work.

LIFE IN A RESIDENTIAL SCHOOL

DR. FRANCIS J. CUMMINGS, Delaware
President, A.A.W.B.

I was twelve when I lost my sight and stayed home for many months recuperating from the ravages of the culprit spinal meningitis. Meanwhile, a blind girl up the street, a student at Overbrook, showed me Braille and sent to visit me a partially-seeing gentleman, who brought with him an alphabet card. And that was

the beginning of my life in the world of the blind.

Of course the ophthalmologists had assured me my visual deficiency was temporary; with returning strength would come restored vision. By the time I realized these prophecies were the kindly, but rather unscientific, means of breaking the news gently, I was more or less accustomed to my new situation.

The visitor with the Braille card finally induced my parents to apply for admission for me in the Overbrook School. Meanwhile, I went back to the neighborhood school where I had spent my early years and listened to the recitations in my older sister's class, taking part in the spelling bees and, most important, learning to use a typewriter. Strangely enough, it never occurred to any one in that remote era to suggest that I resume my place beside by erstwhile classmates.

And in some way perhaps that was a good thing. It is true, I had by Braille and my typewriting but subsequent experience in a school for the blind was to teach me much about the science of living as a blind person that I would have learned with great difficulty, if at all, were I left at home under the over-indulgent guidance of my kindly family.

And so I went to Overbrook. My typewriting and Braille were perfected but I believe one of the chief assets of my residence at Overbrook on the intellectual side was the availability of the library. Then, too, Dr. Burritt had developed a fine cooperative volunteer reading setup: girls from Byrn Mawr, and other schools, ladies from Jewish Council, Junior League, and many interested individuals, came on regular schedule to read to blind students those things that could not be procured in Braille. I took every advantage of this service. Later, in my post-graduate days, another service that Dr. Burritt had developed was of inestimable value to me—the volunteer transcribing service. Ladies of the Red Cross put into Braille for me texts that were unavailable anywhere in the world—Old French, Old Spanish, Mediaeval Latin, etc. —and enabled me to go on successfully with my Ph.D. work.

On the physical side, the residential school holds advantages that are incalculable. I have visited sight-saving classes and have seen youngsters huddled in one room, away from their comrades, not permitted in the halls with the others—they might get hurt; not permitted to do shopwork—they might get hurt; not given any physical education—they might get hurt. And these children, I was told, were living normal lives, staying at home with their families instead of being incarcerated in a horrible institution. What theory will do!

At Overbrook, then, though no great athlete, I took part in the gymnasium classes, in the track work, in the football, the swimming and bowling, and in the unscheduled wrestling and boxing on the playground. Overbrook had not at this time any organized wrestling. (Dr. Quimby was to inaugurate it much later.) None of these body-building activities, Ladies and Gentlemen, would I have been able to participate in in a school for the seeing. And even in the exceptional case where I might have been permitted to join in physical activities, bowling for instance, I would have been gazed at as a freak, complimented for elementary accomplishments, made to feel more alien than if I had confined my participation to score-keeping, activity which does little for body mechanics.

Nor would I, in so-called normal seeing school, been given the manual training which every blind person, inevitably forced to depend on touch more than seeing people, has great need of. At Over-

brook, in addition to the Braille and typewriting, I had various kinds of shopwork, piano and organ (in my case, more manual than musical), geometric drawing, etc. None of this would I have had at home.

I indicated in my address last evening that I believed the social-development program in our residential schools for the blind leaves much to be desired. But that is not to say that the blind student will be more fortunate socially in a school for the seeing. Circumstances will differ in each case. At Overbrook, club meetings, outings with chorus and glee club, friendships made through volunteer reading service, lessons in community living—all this was to be of great value to me in later life. I suppose one might include here, too, the knowledge of orientation and travel that I gained from contact with other blind people struggling with the same problems as I. At home I am sure my over-sheltering family would have hesitated to permit me to travel alone, would have unwittingly and unintentionally hampered my progress toward personal independence.

But if life in a residential school meant much to me intellectually, physically, manually and socially, there is another phase that, for want of a more precise term, I shall call the spiritual side. The friendships that I made at Overbrook and that have lasted ever deeper for these many years are to me valuable beyond estimate. Charles Dickens once wrote (I believe it was after a visit to Perkins) that he had observed that friendships among blind people seemed to have more permanence Well, be that as it may, my blind friends, perhaps because of a common understanding of what we are wrestling with, have always been a source of comfort in time of discouragement, a source of encouragement in time of progress. I do not, of course, wish to be understood as advocating that blind people should make friendships only with other blind people. No, I have invaluable friendships among the seeing. But there is a quality, all other things being equal, about the inter-blind friendships that sets them apart.

Nowhere can one get lessons in democracy, in tolerance, as in a residential school. There were white and black and representatives of every sect, all degrees of mentality from moron to genius; and they all mingled together in a manner that, in view of what I have often seen since, now seems amazing to me.

If, instead of enrolling me in a residential school for the blind, my family had thought of sending me back to my old school, I should possibly have got along bookishly, but I should have missed an invaluable experience.

SECTIONAL MEETING—MATHEMATICS

Topic: Mathematics Used by the Blind in After School Life—Types and Computation Techniques.

Chairman, Mr. Ben Smith, Perkins (Substituting for Miss Ethel Evans).

Panel Discussion

Speakers:

Mr. W. E. Allen, Superintendent, Texas School for the Blind.

Dr. Francis Cummings, Executive Director, Delaware Commission for the Blind.

Mrs. Minnie Hammett, Vending Stand Operator, Austin Municipal Building.

Mr. Penn Hammett, Vending Stand Operator, Austin Municipal Building.

After brief introductory remarks by each of the speakers, a general discussion of the subject ensued. Mr. Allen and Dr. Cummings spoke briefly about the type of computational work which they found it necessary to do in their work as executives. They both felt that mental arithmetic was the most practical for the type of computations necessary in their

work. Both stressed the value of developing facility with numbers of small size and indicated the importance of being able through these skills to acquire a fine sense of the value, size, and relationships of numbers.

Mr. and Mrs. Hammett were not in complete agreement with the others in all aspects of the problem. In their work as operators of vending stands they found it necessary to have some way to record blocks of figures, particularly long columns to be added. For this purpose, they found an arithmetic slate a helpful device. In everyday simple computations they have both achieved a high degree of skill in mental arithmetic. They both felt that more emphasis could be given to mental computational work in schools for the blind.

While there may be situations in which blind people will need to have the assistance of devices to do computations involving large numbers, many find that mental techniques are most practical in everyday situations. Such seemed to be the conclusions reached in the discussion.

THE TYRANNY OF VISION

PAUL C. MITCHELL, New York Institute

(The purpose of this paper is to advocate more attention to the use of sound in the classroom. In this way, teachers of the blind may contribute a unique emphasis to all educational procedures without giving less importance to light and vision as an educational aid for sighted schools.)

Imagine a piano 80 feet long and having 1,000 keys. If the octaves of the electromagnetic radiations could be represented by the keys of this piano, near the center of the keyboard would be six keys, red to violet, representing less than an octave of light, which is the only part visible to the human eye.

The human eye is a camera designed by nature to respond to this light, images of objects being formed on the retina or screen at the back of the eye, to be interpreted by the brain. The light which activates this process belongs to the family of electromagnetic radiations and consists of less than one-tenth of one per cent of the entire range. These electromagnetic radiations vary from the very high frequencies of cosmic rays to the low frequencies broadcast by rotating coils such as are found inside electric dynamos.

On the waves of the narrow band of the visible portion of these electromagnetic waves, educators, manufacturers of visual aids, and teachers have tried to impart most of the knowledge the human brain may assimilate. Fabulous claims of success have been made, especially by the builders and proponents of visual educational materials.

Ironically enough, in using this avenue of teaching and learning, educators are at every point plagued by snares and tangents. In the first place, the eye itself is one of nature's more imperfect organisms. It is subject per se in the physical realm alone to (1) spherical aberration or the deviation of light through a sphere, (2) chromatic aberration or the deviation of colors, and (3) astigmatism or the defect inherent in the focusing of light rays. Inherent physical defects are only the beginning. Physiologically the eye is beset by near-sightedness, far-sightedness,

and a lack of focusing ability. Helmholtz, inventor of the opthalmoscope, once said, "The eye has every possible defect that can be found in an optical instrument and even some peculiar to itself. If an optician tried to sell me an instrument which had all these defects, I should think myself justified in blaming his carelessness and sending him back his instrument."

Many difficulties in vision are explained only in the area of psychology and we are glad to leave such matters in other hands. Undoubtedly there are more illusions in the realm of vision than in all the other senses combined, and camouflage is more successful with light than with any other medium. With no other sense can judgment be so far amiss as with vision. Some inherent difficulties in vision are met in judgment of size and distance. The image of a man 100 feet away is only 1/10th the size of the image of a man 10 feet away. The human brain is able to estimate the difference in distance partly by experience, partly by the stereoscopic effect possible with two eyes and partly by the amount of haze between the object and the eye. On the Moon, where there is no atmosphere, or on this planet in countries where the air is dry and clear, a mountain fifty miles away may look as near as one ten miles away. Many of our automobile accidents are caused because drivers lack the direct ability to judge visual distances. That much depends on experience and interpretation is evidenced by the fact that the actual image on the retina of the eye is always **upside down** and somehow the brain accepts it as **right side up.** Moreover, there is a blind spot in each eye, the existence of which is known by few people, so that every image or picture conveyed to the brain has a small part missing, but the brain interprets the picture as if it were all there.

The Human Ear, a Remarkable Organism

The human ear is a simple device to transmit sensations of vibratory impulses to the brain, impulses ranging from 20 to 30,000 vibrations per second. In this marvelous range of frequency the ear can detect a sound amplitude of less than 10-8 cm., while it is not destroyed by a vibration having an amplitude a million times as great. (The amplitude of the largest vibration picked up by the human eye is about two times as great as the smallest vibration.) The ear is also able to distinguish a difference in frequency of one in twenty thousand. However, the eye, like the ear, does not pick up all the vibrations in its particular field. Supersonic vibrations have been measured, beyond the upper limit of hearing, with frequencies more than five million a second. Thus while the eye explores only 1/1000 of the radiations in the electromagnetic range, the ear may respond to more than 1/50 of the vibrations in the sound range. It thus appears that the mechanism of hearing, not quite so limited as the eye in handling light, is a remarkably successful organism. Sound of a moderately high frequency may be heard by the human ear if the particles of air near the ear are vibrating through space by a distance equal to the thickness of the molecule of air. The small size of the molecule is incomprehensible. If the molecules in a glass of water were expanded until each molecule were the size of a grain of sand, a road could be constructed from New York City to San Francisco and the road would be two hundred feet wide with sand and two hundred feet deep. The average size of a molecule of air is about the size of a water molecule.

Hearing is not beset by a thousand illusions. Only recently have experiments seemed to indicate any such thing as an auditory after image. The nearest phenomenon in the realm of sound that

approaches camouflage is ventriloquism, which for its greatest success depends on visual misdirection. So wonderful is the ear that it can analyze the most complicated sounds into separate components and single out one frequency from many. (The eye can see color only when selectively reflected or filtered, or when white light is resolved into colors by refraction through a prism. If two or more colors are present in a light, only by reflective thinking can it be said what colors are present.) On the other hand, the ear can listen to the rustle of the wind through the leaves of trees, the songs of birds, the splash of waves against the cliffs, or the voice of a friend, hearing each separately, all, or none.

While the ear is attacked by diseases and injured by accident, as is of course the eye, it functions by the simple process of having its drum vibrated and the vibrations transmitted to the brain where a simple interpretation is made. One "hears" the vibrations or one doesn't. There is no inherent distortion in the simple mechanism, no parallax, and no illusions. Aside from an occasional "ringing in the ears" everything is rational, there are no delirium tremens, no virtual images, and nothing is "done with mirrors." Experiments have shown some difficulty in determining whether or not an approaching sound is from the rear or from the front. Once in a while a listener is confused by an echo but any ear can distinguish between the original sound and the reflected sound if given a fair chance. The ear has only to receive two, and only two, vibrations to determine the pitch of a musical sound, a fact almost unbelievable had not experiments proved it true. Since there are two ears, the uncanny ability of the ears to determine the direction from which a sound is coming is explained by the ability of the ears to detect half a vibration. A slight difference in the phase of sound reaching the two ears makes it possible to determine the required direction. No explanation has been found to show why the head always turns, without error, to the correct origin of the sound on the side where the phase is in advance (by less than half a period) of the other side.

Visual educational interests have long advocated the argument that the eye is a better avenue for imparting knowledge. Psychological tests and more careful studies are now beginning to place less value on visual aids, with more emphasis on a better all around sensory experience. Regardless of a more broadminded view by educators, psychologists, and philosophers, research continues in the realm of light with millions of dollars spent in the development of television, color photography and three dimensional movies, all to be desired but without development of sound keeping pace. In this respect vision is a tyrant at the expense of hearing. This is no more apparent than in the field of home radios and sound reproducers. Tests seem to prove that listeners have become so accustomed to hearing "narrow band" fidelity that they now prefer it to high fidelity, having ruined their musical taste. Thus the outstanding adaptation of the human ear, advanageous as it may seem, has become the greatest obstacle toward realizing the best possible progress in using sound as an avenue for training, and for transmitting knowledge. A blind person may become so accustomed to the needle scratch of a talking book, the fading and change in fidelity from the outside to the center of the record, and the change in speed of the motor, that sound defects pass unnoticed while he is engrossed in the story or the music reproduced. This selective ability of the human ear would be all right, were it not for the fact that neurologists are agreed that noise impinging on the sub-consciousness of the

human organism is a factor contributing to nervous disorders. Unpleasant sounds may carry on this barrage against the nervous system even during sleep. In fact noise has been called the invisible killer since it has been known to cripple the mind and the body like a paralyzing ray, varying from the blast waves of an explosion on a battlefield to the incessant hammering of the unnoticed sounds of daily living.

While the human ear can pick up sound from 20 to 30,000 vibrations a second, the average home radio can produce a frequency of between 75 and 5000 vibrations per second. This means that most of the higher overtones that give music its color and warmth are never heard. Coupled with this skeleton of sound are the multitude of mechanical imperfections. The tones are not clear and mellow or soothing to the ear. The only import is the verbalism transmitted to the brain, the perception of ideas imparted through a grating,, grinding, scratching, fading crackling jargon of unearthly and unnatural sounds. Only those who can afford an FM set, or whose radio tubes are paralyzed by the powerful signals of a nearby broadcasting station are freed from these heckling sounds.

Speaking of the imperfections of the modern radio, George Mann, writing in the Toronto Star Weekly, said "We can't blame the radio or phonograph too much when we remember that the cone-shaped disc of the loud speaker has to reproduce all sound waves created by a symphony orchestra. To get a broader range . . . . . most high-fidelity sets cost well up toward $1,000." Speaking of the instruments in the orchestra, Leopold Stokowski said, "Only by clearly realizing the imperfections of our present-day instruments, and by constantly experimenting, can we make them better."

One great contribution that instructors of the blind, and blind folk themselves, can make to all educational processes and techniques, is to reemphasize the importance of good sound. By good sound we mean musical sound that is pure, reproduced sound that has decent fidelity which is not only full and wholesome but is free from pollution. Another contribution which all teachers in schools for the blind may make, and especially science teachers, is to study and utilize every possible means by which sound may be made an experience of the pupil.

How may sound be used in the science classroom? A simple explanation is shown in a discussion of inertia, one of the first topics in physics. The topic is an easy one to explain by relying on pure verbalism. It is also easy to explain in The New York Institute for the Education of the Blind, because every blind pupil in New York City has experienced it on a subway train, both when the train starts suddenly or stops. However, for a class-room discussion to be at its best, some actual experience, there and then, represents the highest type of instruction and successful pedagogy. Inertia can be demonstrated by making interesting use of sound. Have at hand five or six pieces of ⅞ inch boards either round with a diameter of about six inches, or square shaped with a six inch dimension. The boards should be light wood but of different grain, density, or weight, so that when dropped on the table, each board resounds differently. Go to the faucet and fill a glass of water, explaining what is being done as well as taking full advantage of any sound such as walking to the faucet, turning on the faucet and letting the water rush into the glass. Walk back with measured steps to the instructor's desk, place the pieces of wood one on top of the other and set the glass on top of the pile. Tell the class what you intend to do as you take the yard stick or meter

stick down from the blackboard; that you propose to knock the lower block out from under the pile, hoping that the inertia of the glass will hold it there and not upset the water. Strike the lower, **and only the lower** block a sharp blow with the stick, so that the block flies out from under the pile and drops onto the floor with its characteristic sound. Tell the class that each block will be struck in the same manner and continue until the last block remains under the glass. Explain that this is the final test for the inertia of the glass, that you will have to strike the block sharply but that if you hit it hard enough the glass may drop down without spilling a drop of water. Hit the last block, pass the glass around, or let another member of the class try the demonstration again for the whole group. No matter if the pupil does upset the glass, you have demonstrated by an actual experience with full sound effects, that the glass does have inertia.

The same sort of sound effects may be used in the laboratory to show inertia in motion. The ordinary inclined plane with car, commonly found in the physics laboratory may be used. A brick, or other "immovable" material is set at the foot of the inclined plane and a small "tin man" such as a small can, a lead soldier, or even a piece of cylindrical tubing is placed in the car. Notice that the "man" should be of metal so that when he falls out of the car the class can hear him roll or go tumbling end over end. The car is allowed to descend, its wheel grinding against the surface of the plane, followed by the collision with the brick—then silence, except the little tin man rolling over and over, his inertia carrying him on, followed by the exclamations of the class. Here again members of the class may try it, since each single demonstration takes only half a minute. But whether or not any pupils come forward to do the experiment, each has experienced the demonstration through the world of sound. Thus sound may be useful in demonstrating and explaining nearly every fundamental concept in physics and chemistry as well as many in biology and other sciences.

Think what contribution the hissing and puffing of steam might make to the demonstration of an improvised reciprocating engine in the laboratory. Other experiments, selected at random, are the explosion of hydrogen as a test for that gas, the click of metal against a magnet, the whirring of a water wheel, the study of falling bodies, the turning of pulleys, the hum of electrical motors, and a thousand other demonstrations accompanied by sound. Auditory signals may be used in combination with thermal and electronic devices to demonstrate forces of seed germination and the growth of plants. One of the most awe-inspiring, because of the sound, is the laboratory apparatus set up to explain the action of a geyser.

It has been said that sound is to the blind what light is to the sighted. That new ideas in resonance and recordings are possible was proved by a recent radio number and recording which many blind boys and girls have acclaimed as being different. Listeners are still wondering what sort of "sound chamber" or other device was used when the Harmonicats recorded "Peg O' My Heart" and "Fantasy Impromptu." While this is a long way from the science laboratory, it is mentioned to show the attention merited by an adventure in sound.

It is admitted that the science teacher has this world of sound at his fingertips while teachers of many other subjects are hard put to find meaningful experiences for their classes. By that token the responsibility of the science teacher is that much greater in that science instructors of the blind should experiment, do re-

search, and advocate an emphasis on good sound to break the tyranny of vision. This is the most outstanding contribution that science teachers in the field of education for the blind may make to pedagogy and education in general. Give sound its rightful place of importance in enriching life experiences.

A PLEA FOR THE PHYSICAL SCIENCES

ROBERT E. BRUCE, Virginia.

The early scientists were very similar, although, in their individual ways, to the early explorers of our country. They had what life took and their minds were made keener by it. Today there are new frontiers—different frontiers. Some of them are uncharted and unknown and high adventure still awaits young men and young women fired with an explorer's spirit.

We live in a Science Age and our frontier of knowledge, although advanced greatly since the days of early scientists, still has a frontier of the unknown—an area in which to find the answers to present unsolved questions by using not only the usual methods of knowledge, observation and experiment but through a "way of thinking."

This "way of thinking"—the scientific method—can be individually developed in the blind student through his science courses. By the term "physical sciences" we mean the fundamentals of such sciences as Astronomy, Chemistry, Geology, Meteorology and Physics,that is, those sciences dealing with the inanimate world in contradistinction to those whose basic concerns are living things as discovered in Anthropology, Botany, Psychology and Zoology.

Our newspapers, radios, and magazines are filled with factual materials and, in some cases, warnings about the conservation of our natural resources. Our public health, our dependence in today's modern home on the "things of science," and the various potentialities of radio, as frequency modulation (F M) and television for the average American family are vital issues—they are living topics of our "way of life" today. These topics, therefore, must be taught to and understood by our American youth—the blind as well as the sighted.

For such a purpose as a goal, a course in the physical sciences would be designed as an exploration or finding course that would be presented from the qualitative aspect and not from the quantitative point of view. This would be particularly true with respect to the blind sudent. This statement is made because of many years of experience the writer has had with the blind student and with that student's struggles with Algebra, Plane Geometry and the formal computational course in Physics based upon the available textbooks.

At the Virginia School, we have noted that a very small percentage of our high school graduates have attended college. For the remainder of our graduates their formal education has ended when they were graduated at the completion of the twelfth grade. For a factual study of this problem, the writer has determined certain results based upon his experiences of the past many years. In the formal quantitative courses of Albegra I, Algebra II, Plane Geometry and Physics, we have had only an average degree of success in presenting these courses to our blind students. It may be that the use of mathematical-Braille and the slate is a

contributing factor to our not having a better student-success rating. We do have, however, adequate proof of the results obtained in presenting any quantitative subject and we do know that there are fewer students enrolled in these courses beyond the ninth grade, that is the freshman year of the high school department.

In analyzing student interest in high school mathematics and the formal quantitative science subjects by use of the Kuder Preference Record, and basing our factual survey on all students from the eighth grade through the twelfth grade, the results show that only 5% are interested in those subjects of a computational nature and yet 62% are interested in those subjects of a scientific nature. This survey, like the student-success results, gives additional proof for the argument of not requiring these quantitative science subjects but, rather, offering the qualitative science courses.

The whole question of the present-day and future needs of our blind students has been given to study by many of the staff of the Virginia School. The writer does not have all the answers by any means, but is basing his conviction on the thought that this problem at the Virginia School has some similarity in other schools for the blind. Edward J. Waterhouse of Perkins, in his paper presented to the Thirty-Eighth Convention, has so well stated our problem that it bears repetition here; he says: "I think we have to remember that very few of our pupils are going to make any practical use of mathematics (exclusive of arithmetic) after leaving school. Very few go far with the study of mathematics in college. The basic objection . . . . . to the conventional courses in high school mathematics, Algebra I and II, and Plane Geometry, is the fact that they are largely preparatory for work in advanced mathematics, science, engineering and so forth, and these are fields from which most of our students are excluded." The writer is not devaluating our formal quantitative courses for those who will use them for college-entrance credits, but is entering the plea for the great mass of our students for whom completion of the twelfth grade is also the completion of the formal education.

A course in the physical sciences from the qualitative point of view would naturally follow the course in General Science and would also serve as an excellent background for a formal study of Physics and Chemistry should the needs arise. General Science, coupled with the physical sciences, would serve together as adequate backgrounds for the conventional courses in the more specialized science studies depending upon the interests and abilities of the students involved.

We have, therefore, in offering the two qualitative courses in general science and in the physical sciences, achieved the principal objectives of science teaching: 1. to increase the student in his ability to use the scientific method, and 2. to increase the student in his understandings as to the nature of his physical environment.

In conclusion, the writer wishes to present such a qualitative course based upon the textbook "The Physical Sciences," by Eby, Waugh, Welch & Buckingham, published by Ginn & Co., 1943, realizing that other text materials are available and written from the qualitative point of view as is this one:

The Physical Sciences—Contents

Unit One: Astronomy—Sun and Stars: the Solar System: the Sun, the Planets, the Earth; Beyond the Solar System: the Stars.

Unit Two: Geology and Meteorology — Earth Sciences: the Earth of Yesterday; formation of the Earth, the cool-

ing Earth, the changing Earth, Surface Changes; the Earth Today: structure of the Earth, the Earth's resources; resources beneath the surface, the Waters of the Earth; Place and Time; Atmosphere and Climate: the atmosphere, weather, climate.

Unit Three: Physics that All Should Know —How and Why We Measure Things: Classifying and Measuring, length, weight; Mechanics of Solids, Liquids and Gases; Matter and Motion, Forces, Dynamics, Work and Power, Energy, Solids, Liquids, Gases; Our Mechanical Helpers; How we Use Machines, simple machines, special machines, Liquids and Gases at work; Heat: the nature of heat, the steam engine, the gas engine, the Automobile; Flying: Balloons and Gliders, powered flight, the Airplane today; Sound: the nature of sound, Musical instruments, the Voice; Light: the nature of seeing, the nature of light; Electricity: the nature of electricity, electric cells, magnetism and electromagnets, electric generators, induced currents, rectifiers and condensers, measuring electricity, resistance, wiring, electric meters uses of electricity—the telephone and radio; Science in the Modern Home: designing and building, heating and refrigeration, lighting.

Unit Four: Chemistry that All Should Know—Our Chemical World: Chemical Activity, Atoms and Molecules, kinds of substances, kinds of reactions; Chemistry of the Machine Age: the Industrial World, man and fire, iron and steel, other metals; Chemical Industries: glass, pottery, cement, paint, paper, ink, soap and water-softening; Textiles, Dyes and Photography; Chemistry and Life: Public Health, Food, Medicines, Perfumes.

Table of Weights and Measures Index

VALUABLE AIDS NECESSARY FOR THE SCIENCE CURRICULA

P. V. MALEY ,Overbrook

Ladies and Gentlemen of the Section on Science:

Many great contributions on the science curricula have been offered to your group from time to time. Basically they have tended to advance and enrich the teaching methods for the blind. I take this opportunity to salute all of the contributors, for they have made my teaching problems lighter.

It is with this thought in mind that I would elaborate on the improvement of some of our basic methods.

Descriptions of Objects, Models and Specimens

When demonstrating an aid, the class should be prepared for its use. The description of the aid should be presented in a matter-of-fact manner so as to avoid verbalism.

I have discovered that blind students may have "seen" an object or model such as an airplane engine. When asked to describe the engine, they are hesitant because whoever presented the description as an educational aid may not have spoken loud enough to be heard. Possibly he or she did not allow the students to examine the important parts with a follow-up on the functional importance of each part in reference to the machine as a whole. On the other hand, I find that if students are allowed to examine the structure of flowers while someone explains their

function and color scheme, they will, in the majority of cases, obtain a very vivid mental picture, the impression of which will be lasting.

I have heard a student describe the dogwood blossoms at Valley Forge. His description was so realistic that one would think that he actually had "seen" the entire effect. This I attribute to proper description and use of the specimen as a direct aid to learning.

The Field Trip

During class discussions of various scientific topics, we find that to demonstrate thoroughly, it is necessary to have the matter under discussion in its proper location and setting. This, of course, requires a field trip. We should strive to make the field trip a real educational adventure, during which the students are conducted to the actual scene of operation. The trip is adapted to all science subjects and offers us an opportunity to obtain class cooperation.

Field trips to the Zoological Gardens require class preparation, and therefore, have to be discussed with the students in order to prepare them to get a fuller appreciation of the educational specimens with which they will come in contact. Subject teachers should always accompany the group and should provide verbal descriptions of the specimens with information included on the size, habitat and means of locomotion.

Field trips to zoological gardens, museums, and public parks are adaptable to all grades so that students may profit intellectually by this first-hand experience.

The Museum

The school museum should be an orderly depository for the aids to instruction. We should strive to keep all exhibits in a natural setting.

The museum is one of the most valuable means of storing aids for individual or class use. Only such things that contribute directly to teaching should be included in the museum's inventory.

Many students look upon the school museum as some sort of morgue and avoid it whenever possible. It is to our advantage then to rectify this situation by taking the proper means of creating among the students (and in many cases, the teachers), an interest in the museum.

Every museum piece should be properly classified and labeled. Too many things of the same type should be avoided.

We should constantly strive to increase the number of our museum pieces by direct purchases from supply houses, from commercial concerns and by exchanges with other schools.

I would like to take this opportunity to say that we are in a position to exchange a number of models carved in the old Pennsylvania Dutch style. We also have minerals which are found in our State. We would be glad to exchange with other schools in the Association.

Museum bulletins should be published from time to time and made available to all classes. At all times a complete list of the museum's contents should be available to teachers so that they may readily select the aids for their particular courses.

Special displays of material dealing with particular subject should be set up from time to time and all classes should be encouraged to visit the museum and examine the exhibit.

I find that a class project is a most stimulating aid in educating the blind. In the first place, it provides a means of obtaining class cooperation of a high calibre and tends to make teaching concrete, where otherwise it might be abstract.

When we were studying the circulatory system (human) there was a great doubt in my mind as to whether or not the

class had an actual mental conception of the system. Upon reviewing the subject matter, which contained the Pulmonary, Systemic, and Portal Circulations, I was not completely satisfied with the result. We decided that we would make a scale model of the circulatory system.

The model completely demonstrated the following:

1. Pumping action of the heart.
2. Pulmonary Circulation; from right Ventricle to lungs, to left Auricle.
3. Systemic Circulation—to all parts of the body.
4. Portal System (that part of the systemic circulation which supplies the organs of the abdominal cavity.)
5. Venous System.

After detailed construction and study of such a model, students retain the definite knowledge necessary for a clear conception of the human circulatory system.

I find that many students are unable to obtain a mental conception of the structure of atoms. Of course this fact is readily understandable as many sighted persons become very confused on the same subject. In order to give them a concise conception we are using an atomic model which demonstrates the structure of the first seventeen elements in the periodic table and hydrogen. The apparatus can be quickly manipulated to clarify the atomic number in terms of protons and neutrons. It is also possible to show the units attributing to atomic weight and gives a clear meaning of valence.

The model is made up of three concentric discs which represent the nucleus and three outer electron rings. It is possible to rotate the discs in order to show the correct number of neutrons and protons in the nucleus. The outer electron rings are equipped with holes for placing the required number of electrons.

I have questioned the students after using the model and find that they were unanimous in praising its value as a definite aid to learning.

Many fine methods for teaching the blind have been advanced by alert teachers in the field. These methods enable the blind to enjoy a better and fuller life than could otherwise be expected.

The proper use of available aids which this program will receive, and the enrichment it will give, will tend to make our mutual task easier to accomplish.

A NEWCOMER LOOKS AT SCIENCE EDUCATION FOR THE BLIND

CHRISTOS PAPPAS, JR., Perkins

Most of the trouble in teaching science to the blind seems to be concentrated in the course commonly called General Science. General Science is a course which covers a wide range of subject matter.

There are three obstacles to the successful teaching of General Science. One is the lack of preparation in elementary school, so there is need for recognizing the fact that one must build on our set of varied impressions taking in organization. The second obstacle is the outmoded and outdated texts which are used, a fact which is unavoidable. The third obstacle is the inadequacy of models and equipment.

Most of the students taking General Science are, in the most part, unprepared

for the subject, or have such misconceptions of science that it takes a good part of the school year to eliminate these ideas. The best remedy for this situation, naturally, is to provide students in the elementary schools with more intensive and better organized instruction in science.

New developments and technological advances in the field of science come too rapidly to be included in the science texts. If textbooks were to be kept up to date, they would have to be changed every month. Add the factor of converting these texts into Braille, and the problem becomes much greater. The successful teaching of General Science depends, therefore, on how well the teacher is able to keep in step with new developments in science. There is a great deal of material which will, therefore, depend upon the teacher, and not upon references in any text.

Acquiring new equipment depends upon the funds allotted by the school for the Science Department. If these funds are not adequate, the teacher must use his own ingenuity and devise his own models. These models can be made out of plasticine (this medium is very good for cross section models), or from scraps or other inexpensive materials.

What should a General Science course include? Probably fifty per cent of the students will never again come in contact with a science in school. Therefore, General Science should give these students as broad a view of the various sciences as is possible. Students that take General Science and then go on to the other sciences commonly taught in high school, should be prepared for these sciences in their first year of science. General Science must be tailored for these two groups of students. General Science should then:

1—Be subdivided into various sciences. Examples: Physics, chemistry, medicine, astronomy, and others.

2—General Science should treat briefly with a history of each science, emphasizing how each new discovery made possible subsequent discoveries.

3—It should acquaint students with the scientific method of thinking, and show how this method led to new advances in science.

4—General Science should show the student how science has made life more comfortable and pleasant.

5—General Science should keep up with, and stress, the new technological advances that have been made and are being made daily.

6—Finally, General Science should correlate new scientific developments with current events, emphasizing the role science plays in the world today.

The successful teaching of General Science depends upon the presentation of a well rounded, interesting, and up to date course.

One of the most encouraging things about my first year of teaching science to the blind is the avid interest most of the students take in science. They seem to be constantly on their "toes," so to speak. They readily admit their lack of knowledge of certain aspects of science, and are very eager to learn all they can.

My first year of teaching science to the blind has also been very informative for me. It has been an entirely new experience. My only regret is that I did not have the advantage of being pre-trained in the Harvard Class at Perkins, or in other courses which are given a beginner. If this had been the case, I feel it would have been an even more successful year.

I wish to thank the Convention for asking me to express my views, and to make a contribution which I hope will help in some small way.

DOES POPULAR MUSIC RATE CURRICULAR ATTENTION?

HARRY J. DITZLER, New Mexico

No mere rhetorical question, this is a problem demanding realistic consideration. In order that the approach be as representative and objective as possible, instead of reflecting the views of an individual, a questionnaire on this score was sent to the music departments of schools for the blind throughout the country.

Wide divergence of opinion thus gleaned suggests the wisdom of trying to clarify our thinking on this vexing matter; the substance of a few typical replies will serve best to present both sides of the case. One correspondent is "glad some one will finally discuss this matter **out loud**," while another maintains that "there is so much good music in the world that we will do well to avoid the other." In one quarter, a forthright program for popular music is hailed as "progressive thinking," whereas a geographic neighbor affirms: "We already have too much trouble with hill-billy stuff." Incidentally, a teacher in the latter school writes that, while he is in complete accord with the policy of his Director in opposition to the fostering of popular music, he feels the results of the survey will prove helpful in his teaching—cogent reason, per se, for pursuing this inquiry. An instrumental teacher regards the playing of popular music an entree to interest in more serious works; but the head of the same music department considers dabbling in current hits a menace to the study of better music. Along with the extreme pros and cons, it isn't surprising to find a middle-of-the-road reaction, indicated in these two answers: "Yes, for individuals; no, for groups," and "Yes, if there is enough time."

This last rejoinder points up the desirability of qualifying our terms: "Curricular attention" is here meant to connote recognized status in the over-all musical agenda, rather than specific inclusion within nominal school hours. Actually, several schools have long sponsored swing bands or similar student activities on a basis that characterizes them as extracurricular only in that they are not scheduled for time during the conventional school day. After all, our question is less concerned with "when?" than "why"?

Shades of opinion from the zealous proponent to the ardent opponent notwithstanding, all contributors to this presentation are in hearty agreement on the factor of prime importance: namely, that musical standards in our schools **must** be maintained on a high plane. With no thought of boogie-woogie versus "The Three Bs," those who vote yes argue solely in point of vocational potential, aptly summed up thus by one advocate: "A program that fails to reckon with all phases of music would seem to be incomplete, inasmuch as it disregards individual inclinations." Another warns that intolerance of popular music will never stifle it; and that the laissez-faire solution merely allows it to flourish at its deplorable worst. Since the affirmative predominates in the ratio of five-to-one, it behooves us to evolve intelligent procedures for training qualified pupils vocationally.

It is often insisted that those with a genuine flair for popular music will learn it by themselves. That is true—true, however, in the same sense that a person with an unusual inherent grasp of mathematics, bridge, golf, or, indeed, serious music, may well make substantial progress of his own volition. Yet, to throw

any one of these talented folk entirely on his own devices is, at best, illogical. Even before our otherwise amicable Chairman foisted this paper upon me (and upon you), I sought help on this problem from the most propitious source: blind friends currently successful in professional popular music. Asked if, and how, they could have been afforded better preparation in their student days, they responded generously with sound advice, which, together with recommendations from wise teachers in our particular field, is eminently noteworthy, and hence, invites open-minded deliberation.

The highest possible degree of proficiency on one or more instruments is urged for every student contemplating a career in professional popular music. Greater emphasis should be placed on mastering wind instruments; instruction on Hammond organ, electric guitar and accordion should be more generally available. Some maintain that grounding in the so-called "classics" has proved valuable. Ear-training leading to fluent relative pitch, and elementary harmony are essential. In addition to Braille notation for personal use, the student should have intimate knowledge of staff notation and terminology that he may think and speak the language of his seeing musical associates. A limited amount of high caliber popular music should be Brailled to facilitate the study of form. Students should be encouraged, if not required, to "pick up" tunes, and to improvise. In special instances, practice in arranging and scoring is deemed profitable; for such work, the embossing of a reputable text on jazz orchestration is suggested. The best chance of success is to be expected with a small band, wherein arrangements are more flexible, and, in the main, work and pay are more consistent. Finally, great stress is laid on the necessity of screening aspirants with respect to personality and aptitude. Success in this highly competitive field is contingent upon ability to make and retain friends among one's co-workers. Moreover, it does not follow that popular music is the answer, simply because some pupil mopes through Mozart, grieves over Grieg, or despises Debussy.

There, ladies and gentlemen, bred of practical experience, are the makings of a positive program. What shall we do about it?

Many, perhaps most, of our schools have already made a tentative beginning via encouraging, or, in a few cases, tolerating swing bands among their students. Several such groups play for dances and other social functions on the campus or in the community, frequently being paid **in cash** for their work. At least one student outfit, student directed, broadcasts regularly once a week. Some department heads find that these activities fare best when guided by sympathetic teachers; others believe that faculty participation, even to the extent of mere supervision, deters pupil initiative. In any event, these organizations can become veritable laboratories for determining the qualifications of those intent on professional entertaining.

Who that attended the A. A. I. B. Convention at Perkins two years ago does not still harbor pleasant memories of the campus version of the "Pops" concerts? That was a delightful assortment of best hit tunes sung, and, for the most part, arranged by students, obviously assisted by understanding teachers. Significantly, on the same occasion, those young hepcats sang Bach, Schubert and Rheinberger with authority and verve—surely no compromising of cultural ideals there!

At the New Mexico School, next year's curricular schedule will include a class for the serious study of popular music, to be conducted along lines enumerated above.

Last winter, three of our boys, without official aid or interference, joined forces with two boys from the town's public high school to form a swing band. The most attractive features of this venture are, I think, their having proceeded on their own initiative, and the teaming up with sighted collaborators. The dire circumstance that the home-made arrangements were not exactly aesthetic gems did not prevent the band's being hired for local dances and parties. It is precisely because of this wholesome aggressiveness, and with the hope of improving their style, that this class is launched. Admittedly experimental, its results will be appraised through the medium of the swing band, and, by virtue of that test, our two seniors and one junior, as well as their counselors, will readily ascertain whether they possess the prerequisites to a career of which they now dream.

Meanwhile, two of them will remain in the school orchestra which plays only serious music, and the third will continue his work on piano in the best tradition. All three will again be in our senior chorus, wrestling with Palestrina motets, Bach chorals, and their modern counterparts; and all of them will still be key members of a male octet which sings the better music for such groups. Thus, in music as in other aspects of basic education, they will progress as heretofore.

This, I suspect, has been an inadequate treating of a vital problem. One correspondent, after offering welcome advice, opined that he could do much better by the cause were he present to express his views verbally. Doubtless, patient listeners to this dissertation have tangible ideas herein unwittingly overlooked. In conclusion, Mr. Chairman and friends, I propose that we frankly pursue this discussion here, that we give the matter our best thought hereafter, and venture the fervent hope that, subsequently, many of us will see fit to act in behalf of those exceptional students who, with our help, may achieve self-dependence in the legitimate realm of popular music.

THE BLIND MUSICIAN AS CHURCH ORGANIST AND CHOIR DIRECTOR

JOHN MELDRUM, Oklahoma

The possibility that the blind musician might serve his community as organist and choir director of the church of his faith, or of some other church with whose doctrine, teaching, and practice he is largely in sympathy, has long appealed to the writer as a field toward which we in schools for the blind might well direct the attention of our more talented students. There is nothing new or startling about this subject, but it is one that has been too long neglected by educators of the blind in this country. In Europe and England the blind church organist is no novelty. This fact is evidenced by the amount of material prepared for his use by the Braille presses in such countries as France, Germany, and England. We could, without difficulty, mention several blind organists both in this country and abroad who have gained international reputations through their work in this field and in the realm of compositions for church and concert use. Our mistake has been in assuming that only those with talent approaching genius or near genius

could do this work. On the contrary, anyone with a fair degree of musical talent, an alert mind, keyboard facility and an urge to achieve success in this field can be educated to do this type of work.

The remarks contained in this paper are based largely on the experience of one man and are offered for what they may seem to be worth. The problems to be discussed are those which pertain specifically to the blind musician, and the solutions suggested are intended to minimize the fact of his blindness and to create confidence in his ability to deliver the goods.

Too much emphasis cannot be placed upon the amount of academic and musical education that are required before attempting to enter church work. As much academic education as can be acquired without reducing too drastically the amount of time available for the study of music should be taken for granted. Anything less than this would leave the prospective organist uncultured and socially unacceptable.

While no candidate for this work should be expected to finish his musical education in a school for the blind, we music instructors are in a better position than his future teachers are apt to be to direct his aptitude for such work, and to direct his musical development along helpful lines during his formative years. Most schools for the blind have perfect facilities for offering thoroughly practical courses in church music and organ playing. A good pipe organ is standard in our schools; we maintain choruses that may easily be converted into choir clinics and used by capable and interested music students as agencies for gaining experience in teaching, accompanying, and directing. Much as we personally dislike present day electronic organs, probably we should equip our schools with such instruments since many small churches are currently using them.

No musician, be he blind or sighted, should undertake this or any other type of church work unless he feels a distinct "Call" to do so. Some denominations feel this so strongly that they have taken to designating their organists and choir directors as "Ministers of music." We feel this point to be so obvious that it requires no further elaboration.

It will be argued by some that financial return from such positions is very low except in large city churches, and that the one holding such a post will be compelled to supplement the income derived from it with money obtained from other sources. As a matter of fact, the income from church work can only be considered satisfactory if it is merely supplemental to a more adequate salary from another source. The stipends received from occasional funerals and weddings are advantages not to be overlooked when considering church positions. While no one should demand remuneration for playing at funerals, a fee may legitimately be charged for assisting at weddings where hundreds of dollars are often expended for flowers, gowns, and other appurtenances to decorate the church and beautify the participants. Such ethical points as these should be stressed for the benefit of those about to enter this field.

Liturgical services such as are used in the Episcopal, Lutheran, and Roman Catholic churches are those best adapted to the capacity of the blind musician. In such services congregational participation is sought not only in the hymns, but in chants and canticles as well. This means that it is best to repeat the same settings of chants and canticles several Sundays in succession and thus the amount of memorizing required of the organist is reduced to a minimum. Churches that use liturgical services almost always observe

the church year in designing their worship. This means that hymns, canticles, and anthems fitting to the various seasons of the ecclesiastical year are required and so the amount of flexibility in selecting the music is determined well in advance of the time for which it is to be used. This gives the blind organist plenty of opportunity to plan music for each season of the year long before it is to be sung, and thus he can keep well ahead of the game in memorizing his repertoire. Solos by members of the choir are not encouraged in liturgical service, since exhibitionism of any kind is frowned upon. This is advantageous to the blind musician because accompaniments to solos are often so loosely knit that they are memorized and retained with some difficulty. The easier they look on paper, the more difficult they often are to learn. When an enthusiastic soprano says "This accompaniment looks very easy," it's time to start trembling and get to work. Furthermore, in liturgical services the organist directs the choir from the organ bench rather than from the podium. This makes him master of the situation, and permits him to indicate phrasing, dynamics, and other nuances through his organ playing rather than to be required to follow the whim of a director with a stick. There is, too, a definite satisfaction in playing the type of service where the music used is dictated, not by the demands of a musically illiterate and sentimental congregation, but by tradition based upon canons and rubrics, which, in turn, are established on the principles of appropriateness to the occasion plus good taste. Thus for Sunday and other services, for weddings and for funerals there is music definitely established to be used; and the organist finds it his privilege and his duty to require of those concerned conformity in all cases. This situation also works to the advantage of the blind musician since it cuts down the amount of on-the-spot memorizing that might otherwise be demanded of him. Where such conformity is not observed, and we have run into such situations many times, the blind organist must either accept the extra strain and work involved or give up the project.

Let it not be assumed, however, that a liturgical service presents no problems to the blind organist or that everything is bound to move smoothly just because he wishes it to do so. Most clergymen of the faiths we have mentioned expect their services to move smoothly and with split second timing. The blind organist cannot follow the service in the prayer book or hymnal so he must be thoroughly familiar with the sequence of service material, and must memorize diligently all cues that indicate his entrances for responses, amens, etc. The organist cues the choir, and a choir has no respect for or confidence in an organist who is haphazard about such details. Various parts of such services are frequently intoned by the clergyman; at such points it is the duty of the organist to give the pitch so as to instill confidence in the clergyman. Details of this kind should be worked out in advance with the priest and the pattern of modulations and progressions agreed upon should be strictly adhered to by the organist. This is particularly important for the blind organist to remember since he cannot communicate with the priest through the medium of nods, and glances in order to work his way out of a difficult situation.

The processional and recessional are important features of most liturgical services, although the amount of pageantry involved may differ widely in various churches of the same denomination. Here again, for his own peace of mind, and to gain the confidence of his choir, it is up to the blind organist to devise ways and means to put himself in complete control

of the situation. He must know exactly when the procession is ready to start, though it may form more than a hundred feet from him; he must know when it reaches its destination and has assumed its position in the chancel. For the recessional, he must know when to terminate the recessional hymn and when the candles are extinguished, which is the proper time to commence the postlude. No choir has any confidence in an organist who lets it down in these matters. The best way to control this matter seems to be through the installation of a strategically placed buzzer signal, which is disinctly audible to the organist but inaudible to the congregation. This is used in churches with or without blind organists, but often a light takes the place of a buzzer. It can be used at necessary points in weddings, funerals, and at desirable times in regular services to great advantage.

One other problem regarding the liturgical service seems worthy of mention, and that is the Psalm, read responsively and followed immediately by the Gloria Patri. The best method for handling this matter, short of memorizing all the Psalms, is to indicate on one's Braille service list the number of the Psalm, the number of verses it contains, and then copy the last verse. Then, to make absolutely certain of the cue, count the verses of the Psalm on one's fingers as it is being read. And, speaking of Braille service lists, the blind organist should be taught never to attempt a church service, no matter how simple or routine it may seem to be, without arming himself with a complete Braille copy of the order of service, including numbers of hymns, their first lines, and all other helpful information. This is a **must!**

It frequently occurs that the organist, clergyman, and choir are transplanted from their normal environment to another church for some special service. The blind organist is apt to be at a disadvantage in such unfamiliar surroundings, and it is at such times that he must not hesitate to use the eyes of another to keep him informed where he needs information. There is no disgrace entailed in accepting such help, and there may well be disaster in failing to do so. Again may we stress the point that anything the blind musician does to relieve the strain on himself and to create confidence in those with whom he is working makes him a stronger servant of his church and its people.

Of the nonliturgical churches, we have been told that the Christian Science Church offers a relatively easy post for the blind musician. In this church the congregational singing is led by a soloist, and the special numbers are all solos, there being no choir.

The so called "Ecstatic sects," which use mostly hymns, and depend upon congregational singing should form a place for the blind musician to render service.

Here are some things the blind musician in church work must be able to do well. He must be able to transpose hymns and chants "At sight," so to speak. For training in this aspect of the work a good course in keyboard harmony is indispensable and should be offered in the music department of every school for the blind. He must be able to memorize rapidly from either Braille or by ear; for the latter two pianos or a piano and organ are necessary tools. Memorizing by ear should be taught in schools for the blind just as thoroughly as we teach memorizing from Braille.

Is there any way to remove entirely the possibility of mental lapses or blocks? If so, we are not familiar with it. These should not happen more frequently to the blind musician than do accidents of a different kind but similar results to the sight reader caused by turning two pages at once, the music being blown off the rack,

and other unpredictable contingencies. As a matter of fact, the blind musician cannot afford to make as many mistakes as can the sighted organist; it is psychologically unsound for him to do so or to think that he can do so.

We have heard of one organist in a Roman Catholic Church, who read the Braille copy of the musical liturgy with his left hand while playing the organ with his right hand and feet. This sounds fantastic, but who are we to say that it is either impractical, inefficient, or inartistic. Maybe it's a good idea; we wonder?

What does the blind church musician lack in the way of aids to facilitate his work and to encourage him on his way? In this country he lacks service material in Braille, and there seems to be a dearth of competent transcribers available to do this work under special order. We regret, for example, the practice of certain Braille printing houses of Brailling only voice parts of anthems, carols, etc., omitting the accompaniments entirely. This is a tantalizing practice to those who desperately need the accompaniments in Braille. We are, be it said, grateful for what we have in Braille but we need more, much more! There should be some central agency, perhaps the American Foundation for the Blind, equipped to evaluate the work of Braille transcribers and register them so that those who desire their services might be put in touch with them.

In our youth we were impressed by the story of how a distinguished blind church organist in this country would leave the organ bench during the sermon to learn the closing hymn by ear. At the time we thought that a marvelous feat; now we know that there is nothing marvelous about it, and that such things can be done by the average, competent, blind musician. We should attempt to minimize in the eyes of the public the amount of wizadry involved in the accomplishment of otherwise perfectly normal tasks by blind people in whatever field they may be engaged. Assuming that they have the basic talent and ability to learn what we try to teach them, we should go all out to convince our pupils that there is nothing difficult for them in what we are teaching them to do; that whatever we can do, they can learn to do equally well or better, for only thus can we hope to have our work progress.

We do not presume to have all the answers to problems involved in blind musicians becoming successful church organists and choir directors. We would like, for example, to hear a discussion on the blind musician as choral conductor, using baton and other accepted techniques. This has never been discussed at one of our meetings so far as we can remember. Let us air our views, broaden our scope of inquiry into what our people can do with success and thus keep both them and us out of a deadly rut.

GIRLS PHYSICAL EDUCATION PROGRAM IN SCHOOLS FOR THE BLIND

DOROTHY RODGERS, Washington

A keynote for a successful program of Physical Education in Schools for the Blind is adaptability. A teacher with or without experience has to adapt herself to policy changes, personnel, and to the moods and abilities of her students. She has to adapt her teaching to the amount of facilities and equipment she has, and even to changes in weather which sometimes require a maximum of adaptability, as well as ingenuity.

Another keynote for a good Physical Education program is variety. Experience has taught us that our program should be as broad as possible in order to cater to the interests and capabilities of both the sighted and non-sighted, neither to the exclusion of the other.

Using these two keynotes, variety and adaptability, let us consider what makes up a good Physical Education program for girls in Schools for the Blind.

First, what is an ideal set-up in the way of facilities and equipment? A swimming pool is of foremost importance, with at least 10 feet of shallow water to facilitate the teaching of small beginners. There should be a gymnasium equipped with such apparatus as a buck, horse, parallel bars, horizontal ladder, stall bars, horizontal bar, swinging rings, one or two wall pulleys, balance beams, climbing ropes, basketball court, shuffleboard court, standards and nets, covered mats of varying sizes for tumbling and stunts and an adequate supply of balls. The trampoline has possibilities and although I haven't seen any in our schools, it should be worth experimentation.

The gymnasium should be sufficiently large to allow for running, should be well lighted, well ventilated with the best kind of acoustics, adequate shower, locker and dressing room space. Outdoor facilities should provide a large level fall field, a hard surfaced area for roller skating and such activities that require "listening," a running track and other track necessities such as jumping pit, high jump, and standard bowling alleys. For the primary playground there should be sand boxes, slides, swings, Jungle Jim, teeter-totters, ladders. If the climate is favorable for winter activities, there should be ice-skating facilities, sleds and toboggans. Often neglected but important in our field, is the equipment for social recreation such as checkers, chinese checkers, Brailled cards, bingo, dart games, ping-pong. These games as leisure time pursuits should be encouraged.

It isn't likely that there is one school in the country that provides for all of the above mentioned facilities, but now that many schools are launching new building programs, we, as Physical Educators, should launch our own program for getting better equipment and should never give up fighting for it.

For a broad program there are innumerable activities which are not only a necessary supplement to those requiring special equipment, but where the equipment is lacking, an absolute necessity.

Our ultimate goal is to turn out individuals who are fit for life mentally, physically, morally and socially. We know that a good Physical Education Department **can** play a large part in turning out such individuals, but just how large a part do we **really** play? It's entirely up to us to **prove** the value of Physical Education by showing obvious results in individuals. We've got to **prove** that what we are

providing with or without equipment, is a most essential part of the child's all round education and development. Only then will we be able to "sell" those responsible for furnishing the best of equipment and sufficient time allotment. The latter refers to having daily full-period scheduled classes for everyone. Nothing less makes any sense at all.

More specifically, what can we do about the posture, mannerisms, blindisms of our students which is probably the most important as well as the most difficult hurdle to overcome? Does much of the responsibility lie with us? I think it does. We can't gain much headway by occasionally giving posture exercises or even giving them regularly. But we can do it by getting others to cooperate, and by instilling its vital importance within the individual by stressing it in every single activity we teach. We can have contests, where the element of competition can be keen. We can present it in an interesting way in our hygiene classes under the guise of good grooming, personality and popularity. Games can be devised for the very youngest children. If we take a vital interest in Johnny and in our personal conferences manage to inspire within him the **desire** to improve, then our goal will probably be accomplished since in the long run the desire within the individual is two-thirds of the battle. We should try to get other teachers to work closely with us, talk to them at teacher's meetings, make everyone aware of what we are trying to do and **keep it up throughout** the year.

The big-muscle activities may be met in part by well divided periods of calisthenics, apparatus, track, tumbling, stunts, games and relay, tap and folk dancing. These are the types of program that most people think of when referring to gym classes. Any of the standard game books are good. Here again, adaptability plays a large part—in the selection and changing of the rules to fit the situation. Sometimes a game or activity that is a huge success for one group or one school, may be a flat failure with another. For this reason the trial and error method has considerable justification since it is only through this experience that a teacher can evaluate for herself what can or can't be used for a given situation. She should never restrict herself to a few activities that have been proven successful. On the other hand, neither should she reject them merely because they are antiquated. Rather, she should constantly be seeking new and better methods and games to add to her repertoire.

Without minimizing the importance of the big-muscle activities involving apparatus, but in keeping with the national trend, greater emphasis should be placed on the related field of Physical Education and Recreation, with its vitally important social values. Not only to insure variety in our program but to produce students who are socially acceptable in whatever community they may find themselves, a knowledge and skill in all Recreative activities are essential. All educators of the blind talk about the importance of socially well-adjusted graduates. Helping to bring this about **should** be right down our alley. The huge field of Recreation of course, includes the crafts, music, any type of hobby, but we are more concerned with the physical aspect. We should do much more with shuffleboard, roller skating, bowling, rowing, hiking, camping, horseback riding. Most important of all is social or ballroom dancing. A great deal of time should be spent in adequate instruction in social dancing to the point of scheduling individuals for private lessons if necessary. In schools where it is difficult to obtain partners, teachers can be called upon, first having been given the same

type of instruction. The American Folk Dance or square dancing is achieving a new popularity all over the country and can be greatly enjoyed by our students.

If it is at all possible to join in any form of Community Recreation, then it should be encouraged. Contacts through churches, scouts and other organizations can prove valuable providing the personnel in charge make it so. Our boys and girls should be given the opportunity to go to the local skating rink, bowling alleys and dances for the purpose of utilizing what is learned at school as well as for its contacts. High school students attending local high schools while residing in schools for the blind have made great strides in improving their social behavior. The more social functions we promote at our schools so that the social graces become a part of the students make-up, the better our results will be.

Competition in limited amounts has its own merits and where possible, it should be applied. However, when periods of training for specific activities takes up Phys. Ed. time over long stretches, it is not in keeping with our goal of variety. Play-Days have more far-reaching results than competition.

Let us hope we can assume that all schools are provided with at least some of the facilities that have been listed. If this is the case, then the instructor should train herself to know, understand and make the best possible use of all equipment. From there on she must summon all her knowledge and ingenuity for the purpose of adapting a sufficiently variable and worthwhile program.

WHAT ARE THE POSSIBILITIES OF ORGANIZING A BETTER TRACK MEET

CHARLES BUELL, California

Although there is a definite need for such an organization, the National Athletic Association of Schools for the Blind has lost ground in recent years and is now comparatively unimportant. Some of the reasons for schools leaving the association are: (1) padding of meet records by some members; (2) lack of uniformity in excusing pupils; (3) difficulty of obtaining class averages; (4) lack of interest among pupils and teachers; (5) delay in making results known; and (6) inequality in practice time due to climate.

If a better national track meet is to be held, the N. A. A. S. B. must be reorganized or a new association formed. What new rules would be acceptable to the schools?

Proposed Changes

With the hope of obtaining answers to these questions, a list of suggestions was sent to fifty-one residential schools for the blind. Specific items were to be checked and schools were asked to indicate their interest in a national track meet. The following changes were proposed:

(1) All schools must hold their track meets on the second Wednesday of May. In case of inclement weather the meet must be held within the next 48 hours.

(2) Contestants (boys or girls) are to be classified according to age—Juniors, (under 14) Intermediates, (14 and 15) and Seniors (over 16).

(3) The records of the five best performances in each event for each class will be sent by air mail to the President of the association. Class averages will not be computed. Scoring will be on a basis of 5-4-3-2-1 for the first five places in each event for each class. Ribbons or

small medals will be awarded to individual contestants finishing first, second, and third in each event.

(4) Results will be made available to competing schools by the third Wednesday of May. A banner will be awarded to the winning school, and perhaps the runner-up.

(5) Each school agrees to send a faculty representative to another school. He will be present on the day of the meet and performances will be recorded and mailed under his supervision.

(6) Schools with an enrollment over 75 must compete in Class A while smaller schools may compete in Class B.

(7) The event for each class in the boys' contest are rope climb, basketball throw for distance, standing broad jump, and 60-yard dash. The girls compete in standing broad jump, 50-yard dash, and basketball throw for distance.

(8) Senior boys compete in 4-man 480 yard shuttle relay.

(9) Member schools will pay $5 annual dues.

(10) Schools for the Negro blind may participate.

Results of Questionnaire

Check lists were returned by two-thirds of the schools. With more co-operation from the fifteen schools for the Negro blind, this percentage would have been much higher. Only the schools with white teachers, Maryland and Alabama, returned questionnaires. The following schools are not particularly interested in a national track meet; schools not returning check lists, are Overbrook, Perkins, Virginia, New York Institute, West Virginia, Kentucky, Maryland White and Colored Departments, Utah, Nebraska, North Dakota, and Washington State. Pittsburgh, Ohio, Wisconsin and Batavia more or less favor the present organization of the N.A.A.S.B. Louisiana and South Carolina expressed interest in a national meet but did not check specific items. The following schools are interested and returned questionnaires: Alabama Colored and White Departments, Arkansas, Arizona, California, Connecticut, Illinois, Iowa, Michigan, Minnesota, New Mexico, Batavia, North Carolina, Ohio, Oklahoma, Pittsburgh, Tennessee, Texas, and Wisconsin.

The returns clearly show that no objection exists to participation of schools for the Negro blind. There seems to be general agreement in regard to dues, classification of schools, recording of performances, and making results available. There is some difference of opinion on the other items, but at least nine schools agreed to each suggestion.

Recommendations

Since some schools definitely favor the present form of the N.A.A.S.B., it seems unwise to attempt reorganization. A new organization, known as the American Athletic Association for the Blind, should be formed to meet the needs of other schools.

A chief difference in organization would be in the validation of results which would be done by one of two methods. First, exchange faculty representatives. Second, two or more schools compete in a district track meet on the campus of one of the schools. In district meets the official results of the dashes are obtained when individual contestants run against time. To satisfy local interest, those with the best records might be matched in future races, but the results would not count in the scoring of the national track meet.

In order to meet some of the needs and objections listed on returned questionnaires, some modifications of the original suggestions must be made. Schools should hold track meets between the 1st and 8th of May, with results made available by the 15th. Perhaps some changes

should be made in the list of events. For senior boys the shuttle relay might be dropped and the shot put substituted for the basketball throw.

Teachers become more interested in the problems of an organization when they perform the duties of officers. Therefore, the office of President, and perhaps other offices, should be limited to one or two years.

Conclusion

There are definite possibilities of organizing a better national track meet. At least twenty schools are interested in the matter and some agreement as to procedure exists. Since there is also some disagreement, certain compromises must be accepted before a better organization can be formed. The outlook for favorable action is reasonably good.

AUDIO-VISUAL AIDS AND THE HIGH SCHOOL SOCIAL STUDIES PROGRAM

D. W. McCAVICK, University of Texas

The use of audio-visual devices to inform, to persuade, and to entertain are evident on every hand in our world of today. Even the cartoon is recognized as an effective technique for conveying ideas. The news photo, news reel and the use of pictures in magazines and periodicals have been growing in popularity. Business and industry have made audio-visual aids a definite part of their training programs for employees and their sales education programs for the public. The governments of the world are using audio-visual aids to educate, inform the public and to spread propaganda.

Visual devices have been used most frequently in schools to develop concepts, clarify meanings and promote understandings. They may also be used to develop appreciations, attitudes, ideals and a sensitivity to social problems. They are a teaching device by means of which education can be achieved. The use must come as the result of specific needs of the teacher in solving teaching problems to be truly effective. There will never be a substitute for human judgment and certainly the best device will always be a better teaching aid in the hands of competent teachers.

Traditionally, the social studies area covers those portions of the social science subject matter that are regarded as suitable for the elementary and secondary schools. They are developed into the courses that we list as history, economics, political science, sociology and geography. In education, we are thinking more and more in terms of the individual and how to best adapt or equip that individual to find his place in human society as a member of an organized community. It is impossible for the child to come in direct contact with all of the interesting and vital situations, but by the use of audio-visual aids we can bring many of them to the school.

It is encouraging to note the major goals, the objectives of the various units, the integration of the various subjects and the interest of the teachers in instructional aids that will lead to mastery of ideas, undersanding and participation. It is easy to do something if you already know how. It is difficult to discover the lack of "know how" because of the unwillingness of students to admit that they do not know. Sometimes students even think they know but actually do not. Audio-visual materials give us something to

precede the abstract, resulting in a progressive trend toward understandings. Too frequently we learn words, memorize dates, events and statements in order to get a grade and meet the standards for a course rather than comprehension of meanings and mastery of ideas.

We all have had great teachers that could draw from their experience and paint word pictures that have lived for us as vividly as if we had experienced the actual event with our teacher. But teachers with experience and the ability to make words come to life are as difficult to find as great writers, great artists, great musicians, great statesmen and great leaders in all fields. This does not mean just because you do not have this gift that you will not succeed as a teacher or that you will not be a great teacher or that you do not have more ability and talent in many areas. You may keep better records, prepare better tests and teach some concepts or even units better but for items that must be visualized you need instructional or teaching aids. Some teachers will need help for one concept or idea and others will need help for a different problem in the lesson. That is why we feel that the use of audio-visual material should come as an answer to a need of the teacher in solving a teaching problem.

In general the common types of aids that are used in the social studies area are: Still Pictures, Maps, Globes, Charts, Demonstrations, Exhibits, Models, Field Trips, Slides, Slidefilms, Motion Pictures, Dramatization, Recordings and Radio. Our first consideration should be selection of material: it must answer a need of the teacher in solving teaching problems in terms of the group to be taught, the type best suited for the purpose should be selected, it must be selected in terms of he availabiliy of materials, equipment, the room or space and funds available. The second consideration should be planned intelligent student participation. The learner must have a purpose. That purpose must be well established. The student must understand the purpose and be interested in participating in the solution of the problems presented. It must be responsible participation whether mental or physical. The third consideration should be planned activities following the use of the material presented. A discussion period should come first in order to give the students an opportunity to tell about what they have learned and to ask questions about items that are not clear or that they do not understand. A test may indicate items to be re-taught and stress the important elements of the purposes and problems presented. Teach for keeps—by direction, participation, and application.

Material is available on nearly every phase of the Social Studies program. The material varies from school made low cost items to Hollywood productions. The basic types of motion pictures are **direct dialogue**—dramatic productions, **narration** with the narrator telling the story or filling in information to complete the film story, **record type** like a Newsreel recording some events, cartoon type, model or puppet type, animation of the technical type, travelogue and documentary-developing one idea or ideal with a true to life approach. We also find films that may almost be considered an additional type where one or more of the basic types are combined together. The source book for a list of all 16mm. educational films is the H. W. Wilson-Educational Film Guide. Slidefilms both sound and silent are listed in a book Filmstrips by Vera M. Falconer, McGraw-Hill, 1948. The more recent slidefilms and current releases are listed in the H. W. Wilson-Filmstrip Guide. Other types of material are available from the standard supply houses for the items desired.

THE APPLICATION OF AUDIO-VISUAL AIDS IN THE SOCIAL STUDIES PROGRAM FOR THE BLIND

MRS. LOUISE H. HANCOCK, Texas

We will all agree that teachers need teaching aids, and plenty of them, to vitalize, to wake up the susbject matter —and also the students. It is of my experience the last two years with various audio-visual aids that I wish to talk this evening.

These aids are used as supplements to the conventional classroom procedure of text-book reading, recitation, and notebook and theme work. In our social studies classes, American history, American government, and world history, we employed to an advantage such display materials as charts, clippings, illustrated notebooks, posters, and clay models; we gave life to history or rather brought history into our lives with first-hand experiences, such as trips to the state capitol, the state legislature, the museums. From history we gathered an abundance of material to use in dramatic presentation for club and other school programs, for declamation contests, for one-act plays, for recordings. Our classroom town meetings proved to be one of our pet prides; these meetings furnished opportunities for exchange of ideas which certainly provoked thought and stimulated keen interest. I shall also tell you to what extent we used the radio, the record player, the disk recorder, and the sound motion picture projector.

Eager response greets contests, exhibits, and other activities which are competitive. All the boys and girls co-operated in compiling and illustrating class notebooks, e.g., the notebook "Heritage from the Ancients," a world history class project that we entered last year in the Texas Eleemosynary Schools Exhibit. All of the students helped in the making of the wooden and the paper covers for this and other notebooks; however, most of the lettering work fell to the partially-seeing class members. The project of the American Government class for this Exhibit was a dual one, a poster and a notebook presenting knowledge gained about our history makers. Each student did research work on a particular man or woman in the news, and then wrote a biographical sketch for a notebook. Included in the research activity was the writing of a letter to the prominent American requesting information and an autographed photograph. The response to these requests was gratifying; such direct contact with our history makers brought these personalities as vicarious visitors to our classroom. The poster consisted of pictures of these Americans with a few sentences of identification for each.

A teacher can use as allies the drives of self-assertiveness and rivalry to enliven oral reports. Current happenings of headline import lend themselves to such treatment; material can be gathered from diverse sources—current events papers, periodicals, radio programs. A plan, which can prove absorbingly interesting if not enlightening and helpful in developing powers of discrimination and critical thinking, is the one in which a student follows a particular commentator over a long period of time, possibly the entire semester. The student attempts to arrive at some conclusion as to the commentator's economic and political philosophies and then reports his findings at frequent intervals to the class.

An accepted truism, to learn by doing, was applied in our classroom with our town meeting discussions. In these the

students learned to lead conferences as well as to take part in them. Definite preparation was necessary; e.g., in preparation for the discussion "National Sovereignty Must Be Sacrificed for International Peace" all students were required to read various short, related articles from the recent periodicals in addition to the rather long condensation, found in the **Reader's Digest,** of the book **The Anatomy of Peace** by Emery Reves. Other discussion topics included "Is World War III Inevitable?", "Democracy Is More Beneficial Than Enlightened Autocracy," and "Should America Enact Universal Military Training?" Also included in the oral phase of our studies is a monthly report followed by a general discussion of the Braille Map of the Month. In all my teaching I stress oral work, creating ample opportunities for pupil expression of this skill, as I do believe the ability to speak effectively is a **must.**

What better way to teach legislative procedure than by a trip to the state capitol to observe the representatives and senaors in action? The written page comes to life; interest in one's own government is created; and possibly a spark is kindled of one's responsibility to participate in that government. The students say these trips and other activities that they term "sighted experiences" help to build confidence and reassurance that they can successfully fit themselves into a sighted world.

Under the auspices of the Forum Speakers Committee of the University of Texas Union, noted lecturers come to Austin; when possible we avail ourselves of the opportunity of hearing them. One evening this spring the history students had the privilege of hearing Stuart Chase, the well-known American writer and commentator.

Two trains received our attention this spring. All the high school students inspected the Train of Tomorrow; four students were selected as representatives to visit the Freedom Train. The glowing reports of these fortunate four before the school assembly were proof enough as to the worth of the experience. Theirs was a memorable trip, and they fully realized it. I wish their reports could have been recorded for future use. This wish brings me to the discussion of those audio-visual aids the value of which in teaching is inestimable.

No artificial stimuli are needed to get boys and girls to go to a show or to put on a show, to record their own voices, or to listen to the voices of others that are dramatically recorded. Increasingly we are using the radio, the record player, the motion picture to teach history the painless way. Mr. W. E. Allen, our superintendent, has ordered two recorders—a wire and a disk. They'll be put to use! The students have had some experience with recording; they like it; it fires their imaginations and satisfies those desires for self-expression and assertion. Last semester two of the boys recorded "The Death of Socrates" from a CBS Was There radio program. They brought the record to class, and thus ensued a lively and profitable class exercise. Our being able to stop and replay certain parts of the selection helped very much in the discussion and verification of the facts behind the dramatization. I use recordings in my teaching; among the better ones is the series **Dramatic Incidents from American History.** Naturally this type is superior to the pupils produced type, although the "store bought" ones do not seem to inspire the whole-hearted enthusiasm as do the ones in which the pupils have had a hand themselves. With the latter **they** prove that history is living. In May of this year, the American History class recorded a historical skit, "Pine Tree Shilling," which included twelve characters.

Such recordings can be collected in a permanent file for future study.

The radio has been an invaluable aid in my teaching, as I constantly strive to awaken and develop in my students an insatiable curiosity as to what's going on in the world. Therefore, we never slight current happenings. I encourage them to listen to such radio programs as Town Meeting of the Air, Information Please, CBS Was There, etc. And it is surprising how many of them do listen and how often they do; one reason is that they wish to be "in the know' so that they can participate in the next day's discussion which inevitably follows a particular lively air battle. The public address system is used for important radio programs, ones that we feel merit class interruptions, e.g., the President's addresses.

About a year ago the school received from the Ex-Students' Association a gift, the potentialities of which, as a teaching aid, have only been sampled. This gift consisted of a motion picture projector, a microphone, a motion picture camera, flood lights, and other accessory parts. This past year the history classes were shown about 25 films, ranging from ten minutes to twenty-five minutes duration. Some of my students shall tell you what they think of the sound motion picture as an educational device.

Martha Jo writes

> "One value of motion pictures is that the information is presented in a more interesting manner. Many high school students complain of the dryness of textbooks; information gained from a film is entertaining, at the same time, educational.
>
> "It is also true that many students are apt to become tired of just the ordinary recitation. Their minds wander and little is accomplished. But a movie seems to vary the everyday routine and to stimulate the interest of these students that might otherwise sit in class building air castles."

History comes to life, according to Sue:

> "A student studying history may find the subject dull and meaningless if it is taken simply from the textbook—just white pages and black print. However, this same student finds, if his lesson is presented in a different way—by motion picture—that history then takes on a new meaning. The student actually sees scenes from his history textbook acted out according to real and natural life; history seen from this standpoint ceases to be dull and uninteresting, and becomes interesting, informative, and even thrilling and entertaining.
>
> "Of course those who do not see cannot get quite as much from this motion picture type of education as the ones who see. To them the motion picture is useful in that the sound effects are very detailed, and with concentration on the part of the listeners they can, in most cases, determine what is taking place. The acoustics must be good in the place where the show is presented, or there will be echoes and other impediments to the clearness and audibility of the sounds."

Wallace offers a suggestion:

> "I have always enjoyed dramatized documentary and historical stories which are factual. But most of the films are rather dull to me in that the same man tells the whole story or gives all the commentary, and we see none of the things which he tells about. It is really just like a

lecture on a certain phase of a subject in the classroom with the aid of music for a setting. The information given is very valuable, but a person sitting without notebook or any means of listing it can hardly be expected to retain too much in this manner. That is the reason taking notes on lectures in college is necessary, but in the shows we are expected to remember the lecture without the notes. However, we had a film recently which I confess was very entertaining and educational. It was called **Round Trip** and was dramatized very well. A story of this type will naturally stick in a person's mind longer than any type of talk. If all the films we see were like this one the educational film would, I am sure, be much more valuable to students of this school. As a whole, I think that with some improvements the audio-visual film could be made a boon to education."

Nannette found the films valuable as comprehensive summaries, depicting the interrelation of all fields of human experience.

"In these pictures you get a very good over-all view of the subject that is pictured. The picture about the First World War is an example of what I mean along this line. It gave a compact summary of the causes and effects of the War and was a good review of the material we had studied."

Movies bring us up to date, say Martha Lee and Jack:

"And these films may give information that the students would not otherwise get, because this information has been gained since the textbooks were written."

"Through the news strips we are shown current happenings and are given predictions as to the outcome of events by many prominent men of the day."

With understanding come better relations with our world neighbors, says this young man:

"Movies carry us all over the world. They carry us into the future by predictions and into the past through history. We are shown the factories, farms, research laboratories, shipping centers ,oil fields of the present. We are carried to both the centers of work of the world and the playgrounds of the world. We are able to travel to many foreign lands where we are taught lessons on their living conditions and customs. This knowledge brings about better understanding and better foreign relations."

Differences in point of view are brought out in films, one young lady reveals.

"One of the best examples of a film which helps people to think is **Round Trip.** This is a dramatized picture of the trade situation. It is viewed through the eyes of several nations. In this way the students will follow the same example and will look at a situation from some other point of view than their own."

One more comment: the same observation in Vera's words:

"In these movies we also get the benefit of various viewpoints. This broadens our viewpoint to get opinions other than the ones of the author of the text."

Thus speak the boys and girls. Are audio-visual aids **aids** in the teaching and learning process? My students and I say YES!

NOR FISH, NOR FOWL

JOSEPHINE L. TAYLOR
New Jersey State Commission for the Blind

What is the responsibility of the residential school for the blind toward the partially seeing child? Does he belong there? Must he, as Dr. Edward Allen has said so often, "Come in semi-sighted and leave semi-blind"? Are we facing the issue, or must he be constantly in the position of "sitting between two stools"? Who are these children, "nor fish, nor fowl"? And what is, or is not, being done for them?

In order that we may more clearly understand each other, let us begin with the question of: Who are these children? From the point of view of vision, there seem to be three main classifications:

a. Children with normal vision (with few exceptions those who have better than 20/70 in the better eye after correction).
b. The partially seeing (roughly speaking those who have from 20/70 to 20/200 in the better eye with correction).
c. Those who fall within the legal classification of blindness (central visual acuity not exceeding 20/200 in the better eye with correction; or visual field defect in which the peripheral field is contracted to such an extent that the widest diameter of visual field subtends an angle of no greater than twenty degrees).

Under these three main classifications there seem to me to be several important subdivisions which cannot be overlooked. Under the heading of the normally seeing comes a very large group of children who may be called the potentially normally seeing. These are the children with uncorrected eye defects who, if provided with proper medical or optical care, would have normal vision; but who, without it, are functioning as partially seeing or blind children. As long as their vision remains uncorrected, these children present certain problems in their local schools. Sometimes the educational or behavior problems become so great that the children are transferred to schools for the blind, where they remain for varying lengths of time until adequate medical or optical attention is provided.

Likewise there is a group who may be called the potentially partially seeing, who are functioning as blind children but who, if provided with proper optical or medical care, would have vision improved to from 20/200 to 20/70. Probably more of this group are found enrolled in schools for the blind and possibly remain longer.

Children who fall within the legal classification of blindness almost automatically divide into two groups. Those who have no useful vision and those who do have some useful vision. In this paper, those blind children who have some useful vision will be called the partially blind, and the term partially blind shall include all children whose vision falls within the legal classification of blindness and who when taught the print alphabet, are able to distinguish letters of three inches in height or smaller at whatever distance from the page may be necessary or comfortable for the individual.

I should like to tell you the story of how New Jersey is changing hundreds of potentially normally seeing children into children with normal vision, through our Mobile Eye Health Service—an ophthalmologist's office on wheels that drives to rural school districts where regular oph-

thalmological facilities are not available. However, time will not permit this. Nor shall I dwell on the potentially partially seeing. However, I cannot resist saying that I think our first interest in trying to help visually handicapped children should be in seeing that as much of the actual visual handicap is removed as possible.

For the remainder of this paper, we shall consider only the partially seeing and the partially blind. Let us in attacking their problems use bifocal vision so that we may see not only those problems near at hand, within the classroom or on the application for admission to the school for the blind, but also using the distant vision, see the extent of the problems outside the residential school boundaries.

On to the next question, how many are there? Let us first consider the larger group—the partially seeing. According to Hathaway in "Education and Health of the Partially Seeing Child," there are about 60,000 such children of school age in the United States. From various estimates that have been made regarding the number of blind children in the country, it seems probable that there are about 8,000 blind children of school age.* Of this group probably at least half are partially blind.**

What is or is not being done for them? According to Hathaway, about 10,000 of the 60,000 partially seeing children are being cared for in sight-saving classes in public schools. 50,000 are not attending such classes. Of this group, 35,000 live in rural areas or communities too small to warrant the establishment of sight-saving classes. According to the latest annual report of the American Printing House for the Blind, dated June 30, 1947, 5,589 children were attending residential schools and day classes for the blind on January 1, 1946. (Of this group 90 were in training centers for adults and may, therefore, be presumed to be over school age.) About 2,500 blind children are, therefore, not taking advantage of the facilities available to them. Since we do not know who these children are, we can not say what their degrees of vision are, but it seems safe to assume that most of them would fall into the classification of partially blind. Between the two groups, the partially seeing and the blind (including, of course, the partially blind) it may be estimated that there are from 50,000 to 55,000 children with seriously defective vision in this country for whom no special provision is being made.

What is the responsibility of the residential school for the blind toward these children? Can the existing schools and day classes increase their enrollments to include the 2,500 blind and partially blind youngsters who are now "at large," so to speak? Probably not. And obviously they cannot assume the responsibility for admitting to their institutions the 50,000 partially seeing. And yet, as educators of visually handicapped children we must awaken and work toward a solution for the problems of both of these groups. Although we cannot assume full responsibility, I believe that we have an important part to play; that by facing the issue we will improve our schools for the blind by meeting some of our toughest problems; and will assist a very large group of children in whom we should be particularly interested.

The American Association of Instructors of the Blind represent the largest group

---

*Lowenfeld and Mackay—"Enrollment of Blind Pupils in the United States" Journal of Educational Sociology, February, 1944. "The Handicapped Child" White House Conference on Child Health and Protection, Section IVB, Page 47. Hurlin, Saffian and Rice—"Causes of Blindness Among Recipients of Aid to the Blind" Federal Security Agency—Page 124.

**Kirby, Edith—"Eye Conditions Among Pupils in Schools for the Blind—1940-1941". Outlook for the Blind, December, 1942.

of persons interested in the education and general welfare of visually handicapped children. In most states staffs of the school and agencies for the blind are the most vitally interested group. In many states they are the only ones who recognize that a problem exists, let alone know anything of the extent or solutions. The responsibility for being the accelerator or spark plug seems therefore to fall upon us. I believe that the first step is to bring this problem to the attention of the Federal Office of Education, and to each State Department of Public Instruction. It seems to me that because of the scattering of these children, only a state agency dealing with all school districts, can assume leadership in solving the problem. Fortunately some 37 states now have supervisors of Special Education in the State Department of Public Instruction, who should prove to be of great assistance. However, even in these more fortunate states the school for the blind will undoubtedly have to provide the stimulus, for the visually handicapped are the minority group in the field of special education. Whoever it is who lends an ear to the problem will want to know what role the school for the blind will play.

This brings up another of that barrage of beginning questions. Does the partially seeing child belong in a school for the blind? To begin with I think we will all agree that if the partially seeing child does belong in the school for the blind if that is the best facility available to meet his greatest individual needs—whether for the particular child these be academic, social, emotional or physical. I think we must also agree that existing facilities for the education of the partially seeing are woefully inadequate. And we may agree that all partially seeing children do not belong in schools for the blind.

Assuming that we agree on these points, there appears to be several lines of attack which must be taken. The first has already been mentioned: bringing the problem before the educational authorities of each state and enlisting their support and leadership in formulating a program to meet the needs of these "forgotten children." The development of a program must include a statewide case analysis program to study the needs of every blind, partially blind and partially seeing child in order to determine and provide necessary ophthalmological care and educational placement and the expansion of facilities for the education of these youngsters. I believe this expansion should include the establishment of classes for the partially seeing in all communities large enough to warrant them (12,000 school population); counselling and provision of special equipment for children in rural communities; and improved facilities within the school for the blind.

In the development of such a program, the wide-awake school for the blind may become much more than a spark-plug. It may inspire the Division of Special Education in the State Department of Public Instruction or the state agency for the blind to provide the case analysis facilities. In some states it may jointly supervise and finance such a program. It may point out the communities where sight-saving classes are needed, and inspsire the local authorities to establish them. It may also provide the field-worker who will give guidance to children attending rural schools. It may provide institutes for teachers and nurses in rural communities. It may, probably must, become the supply point from which special materials are forwarded to these children. By improving the facilities for the education of the partially seeing and partially blind children within the institution, it may, and I believe should, become a diagnostic and remedial treatment center, to which the children with special needs may come for

as long, and only as long, as is necessary for diagnosis and/or remedial attention. This will mean that when a partially seeing child is accepted into a school for the blind, he and his parents, his local school board, and the staff of the school for the blind will all understand the purpose of his enrollment there, and the plan for his future training, which of course must be flexible enough to include new developments or outgrowths of the diagnosis or remedial work.

However, if the school for the blind is to perform such a service, it must provide thorough ophthalmological care with frequent examination of all partially sighted and partially blind children and corrective treatment when indicated; the physical set-up with proper lighting and modern sight-saving equipment **and** a teacher well-trained in the instruction of partially seeing children and in remedial work. The group accepted into each school must be small enough so that she will have time to give each child the specific help he needs. Likewise time must be provided for her (or them, if more than one class is necessary) to instruct the partially blind children in use of their vision. This work will be time consuming, but the results may be very gratifying. Many of the partially blind children undoubtedly will find that much of their education can be more successful and pleasant if supplemented by use of their remaining vision. Some of the partially blind may, according to actual Snellen chart readings, become partially seeing, and others may prove that they can function better as partially seeing than as blind children. We often find that it is not the **degree** but the **type** of vision that determines whether or not a child is **educationally** blind or partially seeing or both.

In summary, the fact that at least twenty-five schools have established some type of class wherein the partially seeing or partially blind may use their remaining vision as a means of obtaining an education, and the recent development of the availability of large print books on quota accounts from the American Printing House, give evidence that the schools for the blind are anxious to assist these children. Let us remember to use our bifocals, so that we may see the extent of the problem and the part the school for the blind has to play; and also may see the specific needs of the individual partially seeing and the individual partially blind child who enters our schools. If we constantly keep in mind the reasons for which he came, and work toward his readjustment within his local school and community, we will not only be able to serve more children, but will change Dr. Edward E. Allen's old statement to a positive one, "They come in semi-blind and leave semi-sighted."

WHAT IS SIGHT-SAVING?

HELEN POSZ, Minnesota

Sight saving means the conservation of eye sight. Statistics tell us 12% of all school children have eye trouble; one in 12 has defective vision; one in 500 is a sight-saving class child; one in 1900 is blind.

A sight-saving class is a special class, maintained to educate children whose sight does not permit them to do the work as it is presented in the regular grades, or who attempt it only at the expense of their already limited vision.

Sight-saving departments have three definite aims: first, to instruct the students with the minimum of eyestrain; second, to teach them to conserve the vision they possess; and third, to provide vocational guidance and, if possible, vocational training that will enable them to fill useful places in the community.

Who shall go to Sight-Saving classes?

The eligibility of children to sight-saving classes depends to a great extent upon the consideration of individual cases, but there are four types for whom education in the regular grades is practically impossible

1. Children who have more than 2/200 vision (20%) but do not have sufficient visual acuity to enable them to read ordinary print, or to see letters and figures on the blackboard. Or children who cannot read more than 20/70 (64%) in their better eye with correction.
2. Children who have progressive myopia, even though glasses may bring their vision up to nearly normal.
3. Children who suffer from eye diseases that seriously affect their vision.
4. Children who are able to read ordinary print but only at the expense of their vision. Or, in general, any child who in the opinion of the ophthalmologist will benefit.

The Sight Saving Classroom.

The room should be the size of the average schoolroom to allow the children to move about freely in order to see to the best advantage. It should have unilateral lighting and preferably an eastern exposure.

The walls and ceiling should be finished with a dull or mat surface. Usually buff walls with white ceilings are most satisfactory.

The books which are used in these classes are so much larger than those in the regular grades, that more cupboards should be provided. The shelves should be spaced so that the books may be placed in an upright position.

The blackboard is used so extensively in the preparation of work that a large area is desirable.

Not only the quantity, but the quality of the light in the classroom is very important. Light should be controlled by the use of proper window shades, luminaries, and wall decorations. Natural light should be supplemented by artificial lighting of the indirect type. In our school the luminaries have oxidized aluminum reflectors, that throw the light from the inside frosted, double-filament lamps against the ceiling. This produces a soft and diffused illumination, which is free from glare or shadow. Three way switches make it possible for us to separate 500 watt lamps into smaller units of 200 and 300 watts. We get a maximum reading of about 25 foot-candles from this illumination. The natural lighting brings it up to about 30 foot candles—the level for sight-saving classes.

The desks should be movable so that they may be placed in a position near or far as the case requires. They should also be adjustable and the tops should tilt so that the work may be brought up to the child at the proper angle.

Supplies:

Large type books are, perhaps, the most important of the necessary supplies. Textbooks are printed in ink, 18 to 24 point type, the size of the average one-column newspaper headline. One of the most difficult problems is to obtain reading material. Every year new titles are being added, but the supply is still limited and the cost high. As a matter of interest, our school has recently been supplied with hymn books in 14 point type, for use in the weekly chapel exercise. Since the beginning of the present semester, we have

acquired a Winston clear-type dictional containing 32,000 words. We are sure that this will be of great assistance to our sight-saving students.

The paper ordinarily used has a rough finish and is cream color. In the lower grades we use paper ruled with green lines about three quarters of an inch apart.

Most of the work is done with heavy lead pencils, and any type of soft black lead is suitable.

An Underwood typewriter with special size type (18 point), known as a bulletin typewriter, is a part of our equipment.

The Work:

The curriculum for the sight-saving student parallels that for the sighted, and except in the methods and materials for teaching, there is little variation.

In the public schools, a student enrolled in a sight-saving class attends the regular grade for oral work. He returns to prepare his lesson under the direction of the sight-saving teacher. For example, when an assignment is made by the grade teacher, if the material for the lesson is not found in clear type, it will be read to him from the textbook used in the regular grade, or whatever is needed to prepare the lesson will be transcribed. This must be done by hand or on the bulletin typewriter.

A sight-saving teacher is able to take care of only a comparatively small group of children. The number depends upon the organization of the school system and the equipment and supplies that are available.

In our school the reading in the first three grades is presented in the sight-saving homeroom. Beginning with the fourth grade, the work is so adjusted that the sight-saving children and Braille children attend the same classes. In special cases where extra help is needed the student is referred to the sight-saving teacher. However, every teacher in our school is expected to meet the problem of the sight-saving as well as the Braille student.

In 1925, while Joseph E. Vance was superintendent, sight-saving classes were established at our school. This state was the first to make provision at its residential school for children whose vision is too defective to attend public school, but who see too well to depend on Braille.

Past experience has revealed that this special education, supplemented by an efficient placement program, has resulted in productive employment and economic independence for a large percentage of these students. It has insured to the vast majority the retention of that amount of vision which they originally possessed and which might have been jeopardized had they been required to take their training in regular nonsight-saving classes.

REPORT OF THE LARGE TYPE DEPARTMENT AT THE AMERICAN PRINTING HOUSE FOR THE BLIND

MARJORIE S. HOOPER

The establishment of a department for the printing of large type materials for the schools and classes for the blind has been under consideration by the Board of Trustees of the American Printing House for the Blind for the last twelve years. As early as 1936, the Printing House actually published a single large type book — EVERYDAY MANNERS FOR AMERICAN BOYS AND GIRLS—which was dis-

tributed gratis through the gift of a private benefactor. This first book was published in an effort to determine the teachnical problems in the manufacture of this type of book and just how well the Printing House was equipped to do the job. Although the printing of the book was a success, it was not felt at that time that the schools for the blind had their sight-saving programs sufficiently well developed to justify the immediate establishment of such a department at the Printing House with a view to adding this type of publication to the services provided through the Federal appropriation "To Promote the Education of the Blind." In the years immediately following, the establishment of our Talking Book Department, and the expansion of our Braille printing and tangible apparatus departments crowded the facilities of our plant to capacity, and little active thought could be given to the large type project.

In 1944, sentiment in favor of establishing sight-saving departments in our residential schools for the blind had developed to such a point that the Little Rock Convention of this Association passed a resolution requesting the Board of Trustees of the American Printing House for the Blind to make a study of means whereby textbooks in suitable type might be made available to the residential schools for the blind and the public school Braille classes which the Printing House now provides with embossed textbooks. In the same resolution, the Printing House was requested to give consideration "to the possibility of making these textbooks available to sight-saving classes in public schools provided that this should not be done by the use of money now designated to provide embossed books for the blind, appliances, etc., but either by new appropriations, the use of revolving funds or through gifts and legacies."

In October, 1945, the Printing House sent questionnaires to the 53 residential schools for the blind requesting information concerning the number of pupils who could use sight-saving materials. For this purpose, the following popularly used definition of blindness was employed:

> Central visual acuity of 20/200 or less in the better eye with correcting glasses, or a peripheral field so contracted that the widest diameter of such field subtends an angular distance no greater than 20 degrees.

Responses to the questionnaire were received from 90 per cent of the schools canvassed. The replies received showed that, of the total school population, approximately 27 per cent met not only the legal definition of blindness, but had eye conditions which would profit more from the use of suitable large type books than from Braille. In the light of these facts, the General Counsel of the Federal Security Agency ruled in 1946 that "The Act of 1879 'To Promote the Education of the Blind' includes large print books designed for the education of the blind." It was further ruled that, for administrative purposes, the above-quoted definition of blindness should be used.

Consideration was next given to the technical aspects of the problem. The first three points to settle were:

1. What method of printing to use.
2. What books to print first.
3. Permissions to reprint from the ink-print publishers and copyright owners.

An investigation was made of all types of printing procedures. Traditionally, large type books have been reproduced by means of cast type, either linotype or hand-set monotype, as was employed in our first book in 1936. This method probably gives the best results for a clear, well-formed, well-spaced type, at least for the first edition, but it is extremely slow and very, very expensive. Unless the number of

copies to be printed can run into five or six figures, the cost of the type-setting is excessive. Further, since the printer cannot be a fortune-teller, he never knows what the total demand for copies will be. He must, therefore, either try to "guess at" a probable figure on his first run and print hundreds of extra copies to be stored away and bound up as needed, or provide for the storage of thousands of tons of heavy metal type forms against the need for possible future reprints. Either solution is expensive and awkward. The capital investment, against an unknown recovery, is enormous; one is always faced with a large loss through deterioration and damage to either the unbound printed sheets or the type metal; and the storage problems are staggering!

In looking about for a substitute procedure, the Printing House borrowed the idea now employed in many of our schools and classes of using an electromatic typewriter to set up the original copy. However, instead of making single typed copies or mimeograph master stencils, we set our copy on "paper masters" to be printed on an office model offset duplicating press. In addition to paper masters, we also first used the bulletin type, which was the only IBM machine we could get at the time which had approximately the right size of type. Neither the paper masters, nor the bulletin type proved satisfactory or feasible, however, and both have been discarded.

We then discovered that IBM was making a 12-point proportional spacing book-type electromatic typewriter, and purchased two of these. With these, the copy is set on plain white paper, using a heavy carbon paper ribbon on the machine, and the copy is then "blown up" photographically to the desired size, either 18 or 24-point type. Metal offset plates are then made from the photographic negatives, and these plates are used to do the actual printing. (For the benefit of those who are familiar with the long-standing dispute, particularly in the Chicago area, between the newspaper publishers and the typographical unions, this is the method of printing which is being employed, except that the newspapers reduce their type size photographically, instead of enlarging it as we do.)

The benefits of this method of printing are many: The 12-point book-type produced on the electromatic typewritter has most of the qualities of caslon bold which has been the traditional standard. The style of type if simple with few serifs, the impression is even and can be made sufficiently bold by adjustment of the typewriter, and the machine itself produces proportional spacing automatically. The copy can be set by any good typist. Corrections are easily made by retyping whole lines and pasting them over the incorrect line by means of scotch tape. Further, a good typist can set up 70 to 80 pages of copy per day! This method also permits of the insertion of illustrations by pasting them into the copy where they belong before photographing. Perhaps the most attractive quality of the whole procedure is its relative inexpensiveness, not only as to capital outlay for equipment and materials, but also because it eliminates the storage problem. The actual printing plates are thin metal sheets, either aluminum or zinc, which can be stored away indefinitely for future reprints. The printer, therefore, does not have to make large overruns in anticipation of future calls for books, or alternately tie up tons of expensive metal against the need of possible reprints.

Like every good thing, there are also drawbacks to this method. So far, we have not yet found the exact combination of paper carbon ribbon and copy paper which, when the copy is blown up, will produce an extremely well-defined, clean

outline of the letters with no fuzzy edges or black shadings within the letters themselves. Everyone from IBM to the Eastman Kodak people are working on the problem, however, and we have hopes that this difficulty can be overcome. So far, also, we are still novices in running our offset press. To start with, none of us knows much about this method of printing and we have had difficulty accumulating experience in the art. The machine is fast, but delicate. Since we have only one press we can train only one operator at a time, and it has seemed that personnel misfortunes have dogged our footsteps in this operation with disheartening regularity. The move to the new building has also necessitated delay in proper development in this department because other operations had to be put in running order first if the Printing House was to maintain even a semblance of production during the past three to four months.

The next problem was to settle on what to print first. We cannot hope to provide a catalog of large print books comparable to our Braille catalog for years to come. After all, the Printing House was ninety years old last January, and it has taken thirty years to build up our present large Braille catalog since Revised Braille Grade 1½ was adopted in this country in 1918! It was therefore decided that our first attention should be turned to paralleling the basic text and reading materials which are most in demand in our Braille catalogs. Rather than to reproduce books which have been in Braille for a number of years, it was felt wise to parallel the new materials as they are put into Braille. We therefore began with the BASIC READING SERIES also being put into Braille at this time. Some criticism has come to the Printing House because this series duplicates books being put out by another publishing house. May I say in defense, that we were not apprised of the publishing schedule of this other agency when we undertook our printing program, nor did we have any way of knowing that they were duplicating our efforts. Possibly, great good can come from this duplication, for it will give everyone a chance to make comparisons between our books and theirs and permit us to profit by practical experience before the Printing House gets out of the experimental stage with our program and has invested thousands of dollars in equipment, materials and training of personnel in a type of printing method which may not prove to be the best possible for the money invested.

Copyright permissions to reproduce materials in large type have been a real headache. Ink-print publishers who have generously given permission to reproduce their materials in Braille are almost wary of large type publications. The type of printing is too near their own, and they are not sure if there is a commercial market for books of this type. Frankly, it would be a real advantage to all of you if the ink-print commercial publishers did produce their own books, particularly text materials, in both large and small type —if they printed both editions at comparable prices. However, until this time comes, it will be necessary to produce this type of book through the efforts of a non-profit agency such as the Printing House. It has been necessary to conduct a persistent and unending campaign with the individual publishers to win them over to the idea. Actually, we owe a very great debt to publishers, copyright owners, and patentees for the use of their materials and processes. It is only through their cooperation that it has been possible to carry on much of the work of the American Printing House for the Blind. We are happy, indeed, therefore, to report that by-and-large the ink-print publishers are coming to our aid in permitting

us the use of their copyrighted materials.

In conclusion, I should like to announce that the Printing House is actually in production with large type books. A number of first editions have been advertised to schools and classes, and some books have already been delivered. We promise that the complete BASIC READING SERIES will be delivered by school opening in the fall. To those of you who purchase these books, we address the following request: Please give all of the books a **thorough** tryout with your children. In this connection, please note that we started with the beginning books of the series and published them in order. The seventh and eighth grade books, therefore, should be better than the earlier ones, as we have gained in experience. We would welcome constructive criticisms as to format, spacing, type, evenness of printing, and so on. If you feel pictures are essential, give us specific information about the best type of picture, need for color and how to use it, and so on. We cannot promise you perfect books immediately, but we will try to make the best ones we can with constant improvements, and to furnish them to you at a most economical price.

THE RELATIONSHIP BETWEEN A SIGHT SAVING CLASS AND BRAILLE CLASSROOMS IN A SCHOOL FOR THE BLIND

DONALD W. OVERBEAY, Kansas

We have had a sight saving program at the Kansas School for the Blind for two years. It was established because little was being done to adequately educate partial seeing children in the schools of the state.

After pooling the knowledge gained from reading, experience, special summer school courses, and conferences with superintendents of schools having sight saving, it was obvious that no other single program could be transplanted to fit our needs. The eye condition of each one of our partially seeing pupils, the numbers of pupils and their grade placement, the attitude of each Braille classroom teacher with regard to the use of visual materials, the availability of ophthalmological care, our offerings in the field of vocational arts, the training of our sight saving teacher—all these and many other factors were considered in implementing the program.

Realizing that there are many objections to the partially sighted being educated in schools for the blind, we were ever on the alert during the first year for changes in the personality, in academic progress, and in the vision of the sight savers. Among our first group of sight savers were several slow learners and one who was a discipline problem. Most of them had received an indifferent education. They had been in large classes in public schools where they were tolerated but not educated. Any achievement, however small, had been over rated. Few knew the meaning of real mental effort. Only one knew how to study. Those who had had special training received it in a segregated class. These had never experienced the pleasure of being an integral part of the school.

We have a special room for sight savers equipped with six semi-indirect incandescent luminars photo-electrically con-

trolled, adjustable seats and desks, large type materials, excellent maps, and other recommended devices. This room is in charge of a teacher who supervises preparation of lessons for the sight savers of all grades. She hears recitations only in reading, writing, and spelling. Those in our school with enough vision to read large print books and use visual materials prepare the assignments of Braille teachers in this room under optimum conditions for good study. The Braille teachers hear all recitations in the regular classrooms. This seems to be a much better plan for us than for the sight saving teacher to help prepare and listen to all the lessons of sixteen children in twelve grades.

All of our teachers have cooperated fully in accepting sight savers. They feel that all visually handicapped children, regardless of the degree of handicap, are in need of the best in education. Their attitude is not one of mere tolerance but, rather one of wholesome interest which has brought forth their best in experience and training. This attitude is most important and is the greatest contribution made to date to the hoped for success of our program. At no time has any teacher resented the additional burden of having semi-sighted pupils in her class. These regular teachers have spent endless hours preparing lessons on our I.B.M. electromatic typewriter, printing by hand, and searching for helpful materials. You cannot successfully incorporate sight saving into your regular program unless all of the teachers are enthusiastically interested in being helpful. It would be extremely beneficial if each teacher in every school for the blind, whether they teach sight savers or not, could take a course in the understanding of problems peculiar to the partially sighted.

The presence of a sight saving program in our school has been very helpful. We are more aware of the improved morale of every one with the classrooms and dormitories brighter due to good lighting, pastel shades of paint, pictures, and posters. The entire school has benefitted from our increased knowledge of good eye hygiene and eye anomalies. Although we have always been interested in new vocational and recreational possibilities, innovations made for sight savers in these fields have given us greater confidence in what the partially blind and totally blind can achieve.

On the other hand, our school has given much to the sight savers. All have achieved greater stability. They are no longer adrift and insecure. Our school has made demands upon their abilities; it has given them a goal to attain, the teachers and the equipment with which to reach this goal. They are now receiving their proportionate share of each teacher's time instead of being brushed aside or ignored. The increased availability of and our experience with the Talking Book, the radio, tactual models, opaque projector, and other aids has helped many sight savers. While many of these young people were members of youth groups in their home town, they were members in name only. Here they are not only active participants but also leaders in Y-Teens, Boy Scouts, Camp Fire, and Student Council. They play important roles in dramatic productions. They have many opportunities to learn by doing.

So in our residential school we have tried to give those who are partially seeing opportunities to succeed, appreciative teachers who understand the visually handicapped, facilities and services unavailable in the public schools in Kansas. We have given our pupils as much freedom from out-dated restraints usually associated with institutional living as seemed conducive to each one's welfare. In the light of our experience we feel that most of the fears so often expressed by those who

would not educate the partially sighted in modern residential schools are groundless. Although it may be better, under optimum conditions of education, for sight savers to attend day classes with the sighted, nevertheless they will benefit greatly from the right kind of education in a modern residential school.

PRE-VOCATIONAL AND VOCATIONAL TRAINING IN SCHOOLS FOR THE BLIND

ROBERT LAMBERT, Indiana

If the schools for the blind are to train students to live in this complex and ever changing world it would seem that those in charge must recognize that, with few exceptions, each student will in time be obliged to earn his living. The schools should, as far as possible, deal with every child on the theory, that, when adulthood is reached, he is to earn his living. It is obvious that students must work. They will find too soon that nature is stingy with supplies of food, clothing, fuel, and shelter and also reluctant to furnish the luxuries so desired by all. Nature supplies only the raw materials. The rest must be created by human ingenuity and labor. In our civilization man has taken raw products and through vigorous labor controlled them and shaped them to his human purposes, thereby winning the right to enjoy the leisure with travel, art, literature, sports, science, and religion. Occupational labors represent the most fundamental social service. It would seem clear that the schools for the blind should make a serious effort to teach students the dignity of honest toil and its importance to a successful life for the individual, as well as the importance of work in the improvement of our civilization. Some parents desire that their children not be prepared for manual labor. Those who object to vocational education in the schools because manual labor is unclean should note, that it is not the work that is ugly and unclean, but the conditions under which the labor is performed. Labor must have humanizing influences and proper companionship. The worker must be able to conquer over crowded housing, poor food, and a general environment which starves the spirit and crushes the employee to a level of monotony. One purpose of vocational education is the removal of these unfortunate conditions and in their place to substitute conditions which will enable the workers to lead happy, well integrated lives. So far, we have been thinking about highly specialized labor or the worker who does one job. Vocational education to my mind should prepare a student to participate, on an amateur level, in many minor jobs that continually confront one in the run of every day affairs. For example, house construction is the job for tradesmen, but minor repairs and replacements will always be made by the householder himself. Pity one of our graduates who cannot replace the screens on the windows, or renew an extension cord for a sweeper. His wife wants the job performed now, and he will be in the dog house if he is unable to make himself generally useful in making such general repairs. He should keep the household functioning in a reasonably satisfactory manner. Most of our clothing will be made by persons who specialize in such work, but many a happy family is thrown for a loss when the husband finds a button off his shirt. Food, in the main, is prepared in bakeries,

caneries, etc., but some of it will be handled by the woman who manages the home. Husbands and wives do not need to be expert in the many jobs that confront them each day, but they do need a fund of generalized abilities and skills that will enable them to be independent of the specialist whenever the many problems of home life are faced. A person who has a great bundle of unspecialized abilities can get much happiness from mechanical contrivances, because he can use them intelligently to lighten his labors and to elevate his standard of living.

In order that a student may work and enjoy the fruits of his toil it is necessary for him to find a field of endeavor which will fascinate him throughout his working years. This is not easy for the educators or the students of our schools. Guidance is the accepted procedure, but it is a most difficult task—one that may make for human waste and excessive failure unless great care is exercised in guiding the student. Some schools have aided in guidance by:

1. Giving lectures on jobs and vocations.
2. Arranging conferences between interested students and experts on the job or profession.
3. Presenting specific courses of instruction in occupations for the blind.
4. Arranging for guidance through committees and vocational specialists.
5. Giving exploratory courses.

If, through any of these means, we can do a good job in vocational guidance, we have reached the first goal in helping the student to find a vocation that he can live with, and at the same time derive his livelihood from it. If the guidance job is successful the student should get a clear understanding of himself, his attitudes, abilities, interests, resources, and their causes. Furthermore, he must have a knowledge of the requirements of the job and conditions of success, advantages and disadvantages of the vocation, expected compensation, probable working period, together with the prospect of advancement. True objective reasoning on the relations of these two groups of facts usually results in a satisfactory selection by the student of a field of endeavor which will cause him to be successful and happy.

The job of the schools for the blind as it pertains to Pre-vocational and Vocational education is then to give:

1. Special instruction which will enable the student to spend the working hours of his adult life on an interesting job or vocation.
2. Training in the great field of unspecialized labor activities, so that students will not be helpless when confronted with the multitude of relatively simple problems which will confront them in the course of their lives.
3. Adequate practice periods for perfecting skill in the manipulation of the various types of subject matter.

General Objectives as picked from the Vocational Courses of the schools for the blind are:

1. To give factual information and knowledge regarding the course to be studied.
2. Develop the ability to do and to combine knowledge with understanding and skills.
3. To develop desirable attitudes, scientific, social and moral.
4. To foster worthy ideals, purposes, appreciations and interest.
5. To enable students to participate intelligently in general life activities.
6. To encourage the development of muscular coordination.

7. Establish wholesome work habits together with a sense of responsibility.
8. Acquire finger dexterity.
9. Acquire appreciation of the beautiful.
10. Gain confidence in himself through handling of materials and completing work.
11. To develop part-time and full-time vocation or a leisure time activity.
12. To overcome the fear of using power machinery and hand tools.
13. To acquire habits of work that recognize the importance of safety rules.

Salesmanship

General Objectives:

1. To develop the ability to get along with people.
2. To give students a training that will help them to sell their services and abilities.
3. To help students improve their appreciation of personal appearance and poise.
4. To develop the ideal of ethical salesmanship and satisfactory service as the only basis for permanent and profitable business relations.
5. To give an understanding of the psychological principles of selling.
6. To provide opportunities for practical experience in selling.

Specific Objectives:

1. To show the importance of salesmanship in that every one is a salesman.
2. To understand the technique of selling through oral persuasion.
3. To understand the difference between selling and salesmanship.
4. To understand that a thorough knowledge of the product is a prerequisite to successful selling.
5. To provide opportunities for practice in a presentation.
6. To learn how to close a sale by changing the customer's desire to positive action.
7. To understand the necessity of selling one's self to his employer.

In Broom Making the objectives are:

1. To obtain the maximum amount of wholesome and practical pupil growth through the medium of activity and experience.
2. Acquire muscular coordination, skillful, graceful use of hands and body.
3. To make possible self analysis and an opportunity for observation to enable wise vocational guidance.
4. To develop personal social traits, such as patience, industry, perseverance, self reliance, self control, neatness, accuracy, cooperation and appreciation.
5. To learn all the operations involved in making a serviceable and satisfactory broom.

Vocational work is a series of related progressive courses, the aim of which is to train a blind student to attain knowledge of a vocation and a specific skill or a number of skills at a level of achievement that will enable him to meet the requirements for employment in a particular vocation or in an industrial plant, business, office or commercial enterprise which will enable him to produce saleable articles or his services at a profit to himself.

Pre-vocational education is difficult to define, but in general, it has as its purpose, acquaintance, self-discovery, preview, and orientation. It aims to give the student an opportunity to find himself; to discover his abilities, likes, and dislikes; and thus, make a more intelligent approach in his life's work. There can be

no clear distinction between Prevocation and Vocational courses because the two function differently for different students. When a student studies a new course he explores a new field and gets some idea of what lies ahead. He also tries himself out and reveals to himself something about his abilities and interests. This self-evaluation usually takes place in the pre-vocational courses, but it may just as well take place in the Vocational courses of the High School, or even after the student has entered the world of work.

What are the schools for the blind doing in the Pre-Vocational and Vocational field to enable their students to meet the above mentioned problems? A survey of some fifteen schools reveals that a sincere endeavor is being made to meet the needs of our blind children in facing the difficult task of preparing to do a job of work during their adult life. As evidence that the schools are conscious of the need for Vocational training it was found that courses of instruction were given in chair caning, beauty, operator training, broom making, piano tuning, general hand work, general shop, radio repair, telephone operator, mop making, poultry raising, home making, home economics, typing, dictaphone operating, shoe repairing, tennis racket restringing, sheet metal working, general home engineering, basketry, music, machine shop, stand operation, general business, and salesmanship. These courses are well planned and organized with definite aims and objectives. The materials and supplies are carefully selected and the equipment, in the main, is adequate to do a satisfactory job. No investigation was made of the qualification of the men and women who are in charge of these classes, but I am ready to go on record from my personal contact with many of the schools that these teachers are highly competent and that they are doing satisfactory teaching of their students. It is impossible in this paper to break down each course into the specific aims and objectives. It may be interesting, however, to make one more course and show how it is planned in order that you may see that time and effort have been put into the planning of these courses.

SHOE REPAIRING, as taught in Michigan School for the Blind, will be used as a pattern. It was selected because shoe repairing does not seem to be generally accepted as a vocation for blind men.

SHOE REPAIRING:

1. Equipment
   a. Landis curve needle stitcher.
   b. Finisher with trimmer with sole cutter and skiver.
   c. Jacks, hand tools and hook and eyelet machine.
2. Objectives
   a. The development of manual skills, business ability and a personality necessary for operating a shoe repair shop.
   b. A test for determining the student's mechanical ability.
3. Text Books:
   a. Shoe Repairing by Henry Korg.
   b. Shoe Salesman's Manual.
   c. The Romance of Leather and Its Importance to Mankind.
   d. Standards and Ideals in Shoe Repairing.
   e. Shoe Service Magazine.
4. Lesson Plans
   a. A lesson plan is prepared for each student and the student is prepared for the lesson.
   b. The work is presented and an opportunity is given for the student to try the operation.
   c. Students are taught to adjust and clean all machines.
   d. Students must acquire satisfactory skill in each specific operation.

It is evident, I think, from the above plan, that shoe repairing, as taught in the Michigan School for the Blind, makes it possible for its students to become vocationally efficient in shoe repairing.

It was found that each of the vocational caurses taught in the schools for the blind were planned with definite aims and objectives somewhat similar to the plan just illustrated in shoe repairing. Some of the plans are more elaborate, but they all show that the educators knew what skills and attitudes and work habits they wanted to develop in their students. From this investigation as developed so far, it might be assumed that the Schools for the Blind were doing an adequate job in Vocational Education. But before we start congratulating ourselves, let us look into the type and kinds of vocations that our blind men and women actually are following.

In the Report of Inter-Department Committee on the Study of Problems and of Services for the Blind, published by the State of California, we find that in the placement of 662 blind men and women from 1921 to 1946 that 152 persons were placed in professional and managerial employment; 65 persons, in clerical and sales jobs; 51 persons, in service occupation; 28 individuals were placed in agricultural pursuit, 19 persons were placed in the skilled occupations, and 131 were placed in the semi-skilled occupations, while 22 were placed in the unskilled occupation. There were also 23 individuals on which complete information could not be secured. A study of this report for the year 1944-46 shows a total of 119 jobs in which blind persons have found themselves successfully employed. During this period a large proportion found work in the skilled and semi-skilled occupations. It is evident that schools cannot attempt to train their students for the great variety of vocations which our blind adults are now pursuing. Since almost all the States now have satisfactory rehabilitation programs where our students and graduates, within a short period of time, may secure specific vocational training for a definite employment, the problems of vocational education for the blind are being taken care of in a satisfactory manner. It would seem then, that the function of the schools for the blind should be to give training which will enable our students to have a vast fund of pre-vocational and vocational experience which will enable them to choose jobs or professions which will bring them satisfaction and fair remuneration. In this rapidly changing world about all that can be done is to give students general abilities which will enable them to adjust themselves quickly to changing situations. Training for a specific job can be secured quickly if these general abilities have been acquired while in school.

Since in most of our schools a limited number of vocational courses seem to be offered, I should like to suggest a plan which would improve our services to our students. The total number of courses offered in all the schools would meet the needs of almost all the students who attend our schools. It is obviously impossible for any one school to offer all these courses nor would there be a need for such a wide range of vocational opportunities. It would, therefore, be wise to make an arrangement whereby students could be exchanged freely, in order that any student could have the opportunity to study in any one of the vocational courses offered by any of the schools for the blind. This plan would expand and enrich our offerings to all our students, as well as afford opportunities to make valuable contacts in other schools. This survey seems to support the conclusions:

1. That all schools for the blind are doing a good job in giving students

an opportunity to acquire that large bundle of general vocational experiences and abilities so necessary to a happy life.

2. In all schools reporting, certain instruction leads to a definite vocational goal and provides the opportunity for the students to gain the skills, attitudes, and abilities necessary to succeed in the particular vocation.
3. The schools are not providing instruction in all the vocations in which blind adults are being successfully employed. They could not give such a broad range of instruction, but they leave such training to the Rehabilitation Departments where the individual's vocational needs can be solved best by specific instruction for a definite job or profession.

Let me express my gratitude to the teachers, principals, and superintendents of the schools for the blind who were kind enough to write me in considerable detail describing the types of Pre-vocational and Vocational education offered in their respective schools. To them my sincere thanks.

THE SUMMER EMPLOYMENT PROGRAM FOR THE NEW YORK STATE SCHOOL FOR THE BLIND

By
EBER L. PALMER

About seven years ago, through a fortunate combination of circumstances the New York State School for the Blind inaugurated its policy of attempting to find summer jobs for those of its students who were desirous of working. The immediate cause was a letter received at that time from Chas. Butler, Manager of the Hart - Vick Greenhouses of Fairport, New York, one of the largest producers of roses in the State, asking if we ever let our students "go out" during the summer to work. The letter opened up a whole new vista to me. In ten minutes I was on my way to Fairport and in two hours our summer job placement was started with the employment of five boys at the greenhouse for that summer.

Sufficient time has now elapsed to warrant an attempt to analyze the project, to point out its values and suggest possible limitations of the activity. Our experience has convinced us that the advantages far outweigh the limitations.

In the first place, why institute a program of summer jobs for blind students? Unless there are specific values to be gained it is hardly worth the tremendous amount of time and energy that it requires on the part of some member of the staff to administer the program.

Following are the major values which we feel are to be gained by a summer job placement program

I. It enables students to earn during the summer.

II. It teaches students the value of money in terms of work.

III. It gives students experience in actual employment under factory conditions before graduation or before leaving school.

IV. It lessens the enforced idleness of the average vacation period.

V. It gives students actual experience in working and living with seeing people.

VI. It is of value to the guidance counsellor in his evaluation of the ability of students and in developing one of the

goals of any guidance program—namely, self-guidance. It is also of value to placement officers of other agencies.

VII. It enables the students to give references when seeking permanent employment after their school career closes.

VIII. It helps to show employers what blind people can do.

IX. It opens up possibilities for employment after graduation.

As all of the above values are almost self-evident only a brief explanation of each is necessary.

I. IT ENABLES STUDENTS TO EARN DURING THE SUMMER.

Most of you can recall the pleasure you derived in the first regular job you ever held. To those with sight that first job meant much. To the blind person it meant even more for it was the first really factual indication that the barrier of blindness could be surmounted in the economic world and that blindness was merely a handicap and not an insurmountable obstacle.

Our schools are founded on the principle that blind people must learn to be independent in every possible way, including economically, and that blindness does not mean a dole, a subsistence level of living or sympathy and pity all through life. What better way is there to prove that this principle is sound than by actually getting jobs for students, thereby enabling them to earn even while obtaining their education. Our experience has been that the morale of the whole school began to lift when students realized that jobs were not something just to be talked about and hoped for in the future, and that they themselves might earn. They began to look forward with hope rather than discouragement. If there were no other value, the pride with which a student receives his first check would make the project worth while. Incidentally, in one summer's work, 40 students earned approximately $10,000.

II. IT TEACHES STUDENTS THE VALUE OF MONEY IN TERMS OF WORK.

Because of the nature of their handicap, blind boys and girls are constantly faced with the problem of how to cope with those who are over-sympathetic and over-generous. Unless closely guarded, they can easily fall into the habit of expecting favors and gain a very incorrect conception of the ease with which material things may be gained, although it may be at the cost of their personal independence. They need to learn as early as possible that the independent, upright, self-reliant, self-sufficient blind man or woman will correctly appraise material worth and not get into the habit of feeling that the world owes him a living.

When a boy or girl earns his living; that is, is paid a wage for certain services rendered, or for a certain number of hours of work completed, the value of a dollar becomes a real thing, something to be worked for, to be measured in terms of service. Almost automatically his sense of values becomes more properly adjusted. A summer job program furnishes many students an extra opportunity to adjust their conception of what money is, where it comes from and how it can be spent. A dollar earned is usually spent much more carefully than one which just comes along without effort.

III. IT GIVES STUDENTS EXPERIENCE IN ACTUAL EMPLOYMENT UNDER FACTORY CONDITIONS, BEFORE GRADUATION OR BEFORE LEAVING SCHOOL.

Regardless of how efficient it may be, no industrial program of a school can completely simulate actual working condi

tions in industry. It is a different matter to work eight or more hours a day for five or more days a week at some job which may be purely repetitive than to spend one or two forty or fifty minute periods a day in a school shop, surrounded by friends, without the pressure of industry's demand for efficiency and speed, and where the supervisor is a teacher rather than a boss. The summer employment program helps to bridge the gap between the school shop and the factory. Even for the boy or girl who never expects to work in a factory, the experience is valuable. Many rough edges, in his working habits and his relationship with others, are polished off the embryo worker that would have to be eliminated on his permanent job had he not had the experience of summer employment.

For example, the din of the factory becomes familiar to him on his summer job, and when he takes his steady job after graduation that difficulty does not have to be faced. The noise and confusion of a factory is a big hurdle to cross for the boy with no work experience. The summer job enables that student to subtract many such difficulties from the beginning of his permanent work on leaving school.

IV. IT LESSENS THE ENFORCED IDLENESS OF THE AVERAGE VACATION PERIOD.

How many of you have had the experience of having students leave school in high spirits in the spring only to return in the fall, blue and depressed after a summer spent in "just sitting." The blind are no different from the rest of us. If we are busy and active, our troubles are submerged and kept in proper balance with our joys. If we are idle we have too much time to think about our troubles and they become an obstacle rather than a challenge. Institutional schools must, of necessity, take the students away from their home environment for most of the year, and it is difficult for them to readjust to the life of their family and their own community for the short summer period. It may be their fault or it may be lack of understanding on the part of parents or the community, but regardless of where the fault may lie, the life of the community often flows on about them during the summer and they have no chance to take an active part. Nothing could be more deadening to alert boys and girls who are normal in every respect, except that they have impaired vision.

Again the summer work program helps to solve this problem. If work can be obtained in their own community for the summer, that is fine. However there are additional values to be gained by students working away from home.

V. IT GIVES STUDENTS ACTUAL EXPERIENCE IN WORKING AND LIVING WITH SEEING PEOPLE.

The above caption is particularly apt if the work for the summer is obtained outside the students' home community. There are certain advantages to be gained in obtaining employment in the home community, particularly if there are permanent job possibilities in the students' home city. In fact, we advocate obtaining jobs for the summer in or fairly near the students' own community whenever possible. The fact still is true, however, that when a boy is on his own in a strange community he is going to have a far better opportunity to learn to stand on his own two feet without family help, on the job, in the home where he is rooming, and in the community.

If the boy has any tendency to get out of line as far as conduct is concerned when he is on his own, that fact will soon be revealed and it is far better that

he learn his lesson by losing a summer job than by losing a permanent job. Fortunately, among approximately 160 summer work placements made for our students, only three have been dismissed for the above cause.

In general we have found that those students who have had the opportunity of summer work adjust more easily to contact with seeing people and are more flexible in their adaptation to different social and industrial situations.

VI. IT IS OF VALUE TO THE GUIDANCE COUNSELLOR IN HIS EVALUATION OF THE ABILITY OF STUDENTS AND IN DEVELOPING ONE OF THE GOALS OF ANY GUIDANCE PROGRAM—NAMELY, SELF-GUIDANCE. IT IS ALSO OF VALUE TO PLACEMENT OFFICES AND OTHER AGENCIES.

Manual aptitude, personality, and mental tests all help the guidance counsellor to evaluate the ability of a student, but they will not tell exactly how the individual will react when he is on the job.

Observation of the boy at work in summer, away from the school, and reports received from the employer regarding his work, will give the counsellor one more guide post to help him in his attempt to help the student. Placement workers of other agencies dealing with the adult blind have reported that those students who have had summer jobs are more easily located in jobs, and when placed, more quickly adjust to the new industrial environment.

VII. IT ENABLES THE STUDENTS TO GIVE REFERENCES WHEN SEEKING PERMANENT EMPLOYMENT AFTER THEIR SCHOOL CAREER CLOSES.

The above value is obvious. If an employer has a choice of hiring a worker who has had some successful experience, he will naturally take that choice. We have had many cases where the hesitancy of the employer about employing a blind person disappeared when that person could give references as to the quality of his work from one or more previous employers, even if the term of employment was just for one summer.

VIII and IX. IT HELPS TO SHOW EMPLOYERS WHAT BLIND PEOPLE CAN DO, AND IT OPENS UP POSSIBILITIES FOR EMPLOYMENT AFTER GRADUATION.

That the summer work program helps to show employers what blind persons can do is closely related to its value in opening up future job possibilities, is also obvious. This is illustrated by the fact that of approximately 160 summer jobs obtained for students since 1941, 25 resulted in ultimate permanent jobs for our students. Many of these jobs were in industrial establishments which had never before employed blind people.

Some Problems That Must Be Met

1. The conduct of a really efficient program of summer work by our school has been handicapped by the lack of an adequate staff. The amount of time and travel to place 20 to 40 boys and girls in summer work is tremendous, and to give them some supervision requires even more time. In the past this activity has been carried on by the Superintendent.

Obviously with his many other duties he cannot give the program the attention it deserves. With the appointment of a vocational guidance counsellor this year, the burden has been eased. The program does require a great amount of time but we feel it is worth it.

2. During the war years, when the

labor market was tight, the problem of obtaining summer work was comparatively easy. Today employers are more reluctant to hire help for just the summer. This means that to obtain the same number of jobs today, about twice as much work has to be done. We have found seasonal work, particularly food processing, to be the steadiest and most productive of summer opportunities for our students. We feel, however, that in the future, further investigation should be made of other potential seasonal job openings, as food processing jobs are so dependent upon crop success or failure.

3. Many parents object to their boy or girl taking work away from home during the summer. The school must convince the parents of the value of the program where no work is to be obtained in the home community. Usually, this is accomplished by the student himself when he has a chance at a job.

4. It is more difficult to find summer jobs for girls than for boys. During the four years we have included girls in our summer job program, placements have averaged about half the number for boys.

5. Many students come from communities where there are no work opportunities. Jobs must be found elsewhere and parental consent obtained .One must avoid the danger of placing too many in one factory or one locality. We have also avoided placing boys and girls in the same community for the summer. If this is done, the school should assume the responsibility of supervision.

6. In the placement of students in summer jobs, care must be taken to conform to all regulations governing child labor. The responsibility of protecting the employing factory in the matter of obtaining work permits, when they are needed, must rest with the placement representative and the student. The factory should be completely free of any extra duties when hiring a blind boy or girl for the summer.

7. Plans for housing, transportation, and meals must be provided without bother to the concern hiring the student. His movements within the factory must be arranged without extra effort on the part of the factory management. This is especially true in the food processing plants where the work is very heavy during certain seasons and the foremen are responsible for a considerable number of untrained employees. When requested, the school's representative should be ready to remove an unsatisfactory employee from the job.

8. Many employers hesitate to hire blind persons during the summer because of fear of compensation damages, and the danger of additional eye injuries for those who are partially seeing. These problems must be met in the same manner as that taken by the placement agent who is finding permanent jobs for the blind.

9. Care must be taken to eliminate from consideration students who are not ready or able to do efficient work. Thus it can act as an incentive for good work during the school year. As an example we refused to obtain work for one boy last summer due to the fact that his grades and his school behavior had given us no assurance that he would function efficiently on the job or in a strange community. This year the lad has done good school work and his school attitudes have been reversed with the result that we have placed him in work for the summer. Naturally he is delighted. Students must earn the right to be considered for placement.

10. Where a group of girls are placed in a factory during the summer the question of supervision must be met. We have handled this in two ways. First, if responsible parents of a blind child live in the

community where the girls are to work, they are paid for such supervision. If not, one of the staff members has been assigned to work and live with the girls, for which services she is paid extra. In our part of the state the tomato and corn packing season continues for about a month after school is over. Several of our girls have been allowed to work week-ends in factories where help was needed. The school furnished the transportation.

11. The problem of responsibility must be met. Before jobs are obtained, paper must be signed by the parents approving of the work project, and absolving the school from all legal responsibility in case of accident, illness, etc. Since it is a summer time project, carried on when school is not in session, we are merely the agents through which the job is obtained and final responsibility must rest with the parents and the students. On the other hand it is our moral duty to see that all students, working during the summer, are protected in every way possible.

A Few Facts About the Jobs Which Have Been Obtained

A few facts concerning our program as carried on during the past seven years should give a better idea of the value of the project and the diversity of the types of work which have been tried.

As previously stated, approximately 160 summer jobs have been obtained for our students since 1941. This does not include many who obtained work in their own or other communities by their own efforts, nor does it include individuals employed in their own homes. The length of employment has ranged from one to ten weeks, with an average of about six weeks. The maximum amount earned by one student in any one summer was over $400. Of the 160 summer jobs obtained, as stated previously, 25 have resulted in permanent employment.

The types of work carried on have varied from straight manual labor to such specialized fields as dictaphone operation and complicated assembly, sub-assembly, inspection, and packaging. In the canning factories, the work ranged from pitching peas to operating different types of machines and holding down stations on various conveyor belts. Many jobs were located in the warehouses of the factories.

The following list illustrates the diversification of summer jobs held by our students during the last seven years: canning factories, 65; greenhouse, 19; electrical manufacturing, war industries, shoe factory, freezing plant and associations for the blind, 6 each; railway signal company, razor blade company, 4 each; stand operation, basket factory, playing in restaurant, 3 each; insulator factory, home assembly for factory, box factory, candy company, radio factory, theatre usher, 2 each; and farm, button works, abrasive factory, air depot, glass company, refrigerator company, aeronautical factory, precision instrument factory (dictaphone), naval supply depot, hospital orderly, optical company, Kodak company, insurance company (dictaphone), newspaper (subscription department), and typewriter company, 1 each.

Conclusion

As the labor market becomes easier, undoubtedly the problem of obtaining jobs will become more difficult. With the addition of a vocational guidance counsellor to our staff, the project should receive more careful attention to the future. We have made mistakes, but we hope we have profited by them. The program has added administrative problems. However, when all mistakes, difficulties, and problems are weighed against all of the values to the students, we are convinced the project has been worth while.

TWO YEARS OF TRAVEL TRAINING AT THE MARYLAND SCHOOL FOR THE BLIND

FRANCIS M. ANDREWS

During the war years I had the opportunity to visit Valley Forge General Hospital and see what was being done for the blinded veterans. One of the things which greatly impressed me was the ability of these newly blinded men to move around with considerable ease, with the help of a cane. I wondered then why none of us had ever before attempted to teach a travel technique. The more I observed these men, the more determined I became to inaugurate some such course, should the opportunity present itself. I also realized that there were definite rules to this thing called "travel," and if they were not properly taught and observed much could go wrong.

We were, indeed, fortunate, when in 1946 Mr. Richard E. Hoover decided to study at The Johns Hopkins Medical School, and we were able to arrange a schedule mutually satisfactory which would allow him to teach travel to our pupils. No one in the country is better qualified to teach it than he, for it was mainly through Mr. Hoover's efforts that this method was perfected.

I believe we have been somewhat complacent in our schools, concerning how our pupils got around. There has been no definite program of orientation. The new pupils have been taken in tow by the older pupils, assisted to class rooms and shown over the cottage. In some cases, they have been dragged or propelled, and always when they went off campus some sighted or partially-sighted person was with them.

As time went on, they became accustomed to their new surroundings, and, as they became more independent, we patted ourselves on the back and took credit for doing a good job. If they didn't want to use a cane when they went out alone, we sometimes urged it on them and, perhaps, took time out to show them how to hold it so that they would not look too awkward; but on the whole we didn't do too much about it. Certainly, I have been guilty of this kind of thing, and, I fear, many of the rest of us have. Probably this should be labelled one of our sins of omission.

It is not surprising, then, when it was suggested that our pupils take lessons in the proper use of a cane that the idea met with little enthusiasm. In fact, it met with a cold reception. It was new to them. After all these years of hearing how independent one should be and more or less ignoring a cane, why something like this? Wasn't the cane a nuisance? Didn't it get in your way? What would you do with it when travelling on a street-car? Didn't it make you more conspicuous? Wasn't it a clumsy thing to handle? Was there a folding cane available; if not, why not? It was apparent that there was an inward resentment on the part of this first group which had to be overcome.

The group we chose for this first course were those totally blind students who were attending the city high schools and living with us, for they could put such training to immediate use. They were, first, taught the rules of indoor travel and, when that was mastered, were started off with the cane as to the proper method of handling it both inside and out. Some took to the training quicker than others, but we believe it paid dividends to all.

The course can be a very intensive

one or spread over a number of weeks. In the case of the students, the latter method was used. It was encouraging to us and gratifying to the high school girl who walked back from the car line alone, one day, and announced she had made it. Then, when the Christmas vacation arrived and some of these students asked to borrow a cane to take home with them, we knew the idea was beginning to take root. The day three of the girls decided to go to the car-line to meet another girl and to explore Overlea was a "red-letter" day for them. They came back, laughing at the things which had occurred but enthusiastic over the fact that it was now possible for them to go alone if they used the cane.

At the end of the first year, more students wanted help, and more people interested in the blind were asking for an opportunity to take the course. Mr. Hoover was able to give two, short, intensive courses during the summer of 1947 to a very few seeing people who were going to work with blind adults. More time could have been spent on this work for it is tremendously important that the prospective teacher thoroughly know his subject. There is a tendency on the part of some to want to obtain just the high lights, and once having mastered these they believe they know all that is necessary. Would you expect to become proficient in piano playing or running a car by just picking up ideas? There is as much to "travel" as there is to any other subject. We must not do slip-shod work.

In the fall of 1947 some of us seeing teachers decided we, too, should take the course so that we might help teach the subject. We had at least one lesson a week and for all lessons were blindfolded. I believe this is the only way travel technique should be taught to a seeing person for then you have a far better idea of the subject and a feel for it that you could not possibly get in any other way. Incidentally, it gives you some slight idea of the problem which your student is constantly facing. All of the teachers, whether they took the course or not, have become far more conscious of what Mr. Hoover is trying to do. All of them seem to have taken a more active interest in the pupils' posture, blindisms and appearance.

Since teachers have taken the course, more pupils have had an opportunity for training. It is not uncommon to receive a 'phone call, asking if anyone on our staff can teach "travel" to some adult blind person, but unless that adult can get out to the school we have not as yet been able to help in such cases.

This year we have started some of the small children. We find that it takes a great deal of time to accomplish anything with the little ones for they cannot concentrate for any length of time and as yet are not particularly interested in whether or not they get around well.

We feel that "travel" is worth while. We do not claim it is the only thing for the blind, but we believe it is of tremendouse help and has been successful here at The Maryland School for the Blind.

REPORT OF THE AMERICAN FOUNDATION FOR THE BLIND AND AFFILIATED AGENCIES

ROBERT B. IRWIN, Executive Director

The year 1948 marks a milestone in the work of the American Foundation for the Blind, for this year we celebrate our twenty-fifth anniversary of active service. During these years, we have worked indefatiguably for those movements which would give blind people more equitable treatment in a world where everything in life is planned for people with sight. No part of their life has been beyond our purview—cultural, spiritual, social or economic and throughout our own life, we have worked zealously to arouse public interest in the blind and in their capabilities, cooperating always in every sound, forward-looking movement designed to achieve those ends.

Perhaps, then, it is time to pause and do a little stocktaking of some of these achievements.

In one way or another, we, at the American Foundation for the Blind have directly or indirectly promoted the establishment of state agencies for the blind in nearly every one of the forty-eight states.

We have worked unceasingly to improve the education of blind children through:

1. The operation of an experimental and demonstration school, jointly with Perkins Institution.
2. The publication of a professional magazine and books for teachers.
3. Surveys of schools for the blind.
4. The development of educational Talking Book records for blind children, with the assistance of the Carnegie Corporation and the W. K. Kellogg Foundation.
5. A dramatic arts training project for blind children, with the help of the Rockefeller Foundation.
6. Cooperation in the development of measuring scales of intelligence and educational achievement tests.
7. The conducting of special training courses for teachers of blind children.

We have provided higher education scholarships to promising young blind students. These scholarship students now hold positions as social workers, osteopaths, college teachers, lawyers, ministers, executives of agencies for the blind, dietitians and in numerous other capacities.

To date, we have granted 381 of these scholarships, totalling $90,000 to blind people in 42 states and three foreign countries.

We have worked to provide broader opportunities for the employment of the blind through special studies of occupations and professions in which they may excel.

We established National Industries for the Blind and obtained the cooperation of the Federal government in providing employment to thousands of people without sight, particularly during the war years, manufacturing commodities for the Government for which they earned millions of dollars in wages.

We obtained a Federal-State relief system for the blind which extends monetary assistance to scores of thousands of needy blind people.

We have developed improved methods of Braille printing which reduced the cost and bulk of embossed books by nearly one-half.

We promoted the adoption of a uniform

Braille code for the English-speaking world.

We prevailed upon the Federal government to establish regional libraries for the blind in all parts of the country, to provide a collection of embossed and recorded books undreamed of a quarter of a century ago, and to make available through free loans to the blind almost 30,000 Talking Book Machines.

We developed Talking Books on especially adapted phonograph records for blind people who, because of age or for other reasons, cannot read Braille. These have brought the power of reading to thousands of persons who thought they could never read again. We have also conducted a demonstration recording studio for the manufacture at cost or less of high fidelity Talking Books for the blind for the Library of Congress and for others. To date, 1,490,311 Talking Book records have been produced, including the entire Bible.

We have established a Technical Research Department and developed special appliances to minimize the handicap of blindness, such as improved Braille typewriters, high quality Talking Book Machines, low cost recording machines, scales for weighing, a thermometer which can be read by touch, measuring devices which open various fields of employment to the blind, and a host of other devices and appliances with many of which you are no doubt familiar.

We obtained the cooperation of the railroads and other common carriers, enabling blind people to travel with a guide upon the payment of only one fare. To date, we have furnished 45,442 coupon books to blind people in all parts of the country.

We provided special services to the deaf-blind; helping local agencies for the blind and the deaf to give comprehensive care to this doubly-handicapped group. In addition, we have furnished hearing devices, special radios, Braille writers and typewriters to a number of the deaf-blind for whom resources for these necessities were not available elsewhere. We launched a new magazine for the deaf-blind — TOUCH AND GO—which has served to meet a long-cherished wish of a large number of the deaf-blind. We have aided with a scholarship for the past two years a deaf-blind college student. We have conducted, during World War II and since, a special consultation service to blinded service personnel, giving each a Braille watch and other special equipment not then available from the government. To date, we have distributed 1,410 watches to the blinded service personnel and have supplied the service hospitals and the Veterans Administration with quantities of equipment furnished to the war blinded under Public Law 309. At the request of the Veterans Administration, we conducted training courses for four groups (approximately 120 men) employed as training and rehabilitation officers by the Veterans Administration.

We have maintained summer school courses and institutes for inservice training for home teachers of the blind, relief workers with the blind, agency executives and other social workers with the blind. At the present time, we are conducting summer courses at the University of Michigan, and we are cooperating with Columbia University, Hampton Institute, the University of Washington and the University of Wisconsin in conducting special courses for teachers of and workers for the blind.

We have operated a summer vacation home for blind women where hundreds of sightless women find recreation and diversion. So far, 1,217 women and their guides have received, at no cost to them, an eighteen-day summer vacation.

We have given 6,203 radios to blind men and women who could not afford to buy them.

We have made available to the blind, at cost or less, special watches, Braille typewriters, standard typewriters and other special equipment.

We have conducted a special reference and lending library of inkprint books on subjects of interest to workers for the blind.

We have arranged for national and international conferences with special reference to the blind, such as a world conference on work for the blind in 1931, a national conference on the preschool blind child, conferences of workshop managers, state executives, etc.

The American Foundation for the Blind maintains an information service to lay and professional people interested in the blind. It renders free consultation service on the ground on such subjects as the operation of city and state agencies for the blind, relief administration, workshop management, care and training of blind children of preschool age, etc.

Time does not permit of a more detailed accounting of our stewardship during the past quarter of a century. Suffice it to say that these achievements would not have been possible without the understanding, cooperation and the timeless help of a whole host of people too numerous to mention—Helen Keller, always the inspiration of all work for the blind, a loyal and devoted Board of Directors, an energetic and tireless staff—both blind and sighted—who have worked as a team to try to make the lives of our blind happier and more rewarding. We owe gratitude to the support and encouragement given us by you of the American Association of Instructors of the Blind and by the many hundreds of devoted associates staffing our agencies—public and private—national, statewide and local—in all parts of the country.

I regret very much that I am not able to be with you today but please believe that my thoughts are with you and that my greetings and affection are as warm as though I were among you. As you know, the American Foundation for the Blind has, during the past two years, given very considerable attention to the revival and development of work for the Overseas Blind. In 1945, we organized the American Foundation for Overseas Blind as successor to the American Braille Press (organized in 1915). Last year the American Foundation for Overseas Blind:

Established a Central Committee for Blind Workers in France through which the condition of sightless people in that country has been markedly improved;

Maintained a Braille magazine in the French language which has brought hope and encouragement to the blind people of France;

Provided essential equipment to several institutions for the adult blind in France;

Modernized the Braille equipment in the printing house for the blind in Belgium;

Provided Braille slates, Braille writers, Braille paper and other equipment to schools for the blind in Belgium, France, Greece, Holland, Italy, Poland and Yugoslavia;

Provided raw materials for the production of Braille books in Italy;

Manufactured Braille printing machinery for presentation to Brazil, Czechoslovakia and Greece;

Provided, in cooperation with the National Institute for the Blind in London, fellowships to six

Greek social workers for a six-months' course of training in methods in work for the blind, with the understanding that the government would set up a department for the blind in Greece.

This summer, I have found it necessary to revisit some of those European countries which before the war were in the forefront in some of the most progressive movements for the blind ever devised. The needs of the blind in Europe are desperate indeed and the American Foundation for Overseas Blind is seeking a minimum of $300,000 to be spent this year. It is our hope—and in passing, may I say that you yourselves through your own schools are doing much to realize it—that with our united efforts a brighter day will yet dawn for our blind comrades throughout all of Europe.

Your help—your understanding—and, above all, your continued encouragement and cooperation cannot fail to still further enrich the lives of blind people everywhere. We know we can count on you.

THE USE OF MENTAL MEASUREMENT IN THE EDUCATIONAL AND VOCATIONAL GUIDANCE OF THE BLIND

SAMUEL P. HAYES, Ph.D., Perkins

More than 30 years ago Dr. Burritt at Overbrook and Dr. Allen at Perkins became impressed with the value of intelligence and achievement tests for the classification and educational guidance of blind children, and the writer was engaged to adapt and introduce into these two schools the most promising tests then available. Many other schools have taken part in the test movement, sending their results to be used in our reports published in the Teachers Forum and the Outlook. Schools which have been able to finance a resident tester have come to feel that objective measurements of the children's intelligence and school achievement are almost as important as the physical, dental and ophthalmological reports made by their physicians. Perkins has also developed a research center for trying out and adapting new tests, often with the cooperation of other schools. In order to pass on as much help as possible, I will sketch the present testing and research program at Perkins, indicating old and new projects in which other schools may be interested to participate.

1. Intelligence tests and testing.

Whenever possible, Perkins is glad to have new pupils come to the school for testing before admission. If this is not feasible, they are given a test in the early weeks—as soon as they seem to be comfortably adapted to the school environment. With smaller children, who will enter the Lower School (kindergarten through 6th grade), the 1942 Interim Hayes-Binet test is the first one used; with older children, whose size and age indicate that they will be pupils in the Upper School (7th grade upward), the Wechsler-Bellevue Adult Intelligence test is used first. The resulting MA and IQ, taken in connection with a child's former school record (if any) and all that can be learned about the family and home environment in which he has lived, determine whether the child is probably educable, and give evidence concerning his grade placement. We do not take the first IQ too seriously, however, because we have often admitted on trial rather unpromising children who have gradually "blossomed out" when our favorable en-

vironment has been substituted for the neglect or pampering experiences in their own homes. After admission, we plan to retest all children every two or three years, and if a child repeatedly tests low and does not make progress in school work, or even in manual activities under individual instruction, we have an abundance of scientific evidence to justify his elimination as educationally unfit. If a child tests about at his age level, we can try him in a grade which seems appropriate to his age and former school experience, giving him individual instruc tion in Braille, etc.; if he tests well above his age level, we may locate him still higher with the expectation that the challenge of more difficult school work will motivate him to take full advantage of his higher powers. And with our frequent retests, we can make periodic comparisons of each child's apparent native ability with the use he is making of it in the class room. By using different scales on retesting we avoid the danger that memory rather than intelligence will determine the test results. The lower school children who are first tested with the Hayes-Binet will later be tested with the Wechsler, and vice versa with the upper school pupils who are first tested with the Wechsler. Last year Wechsler Form II was made available, and as our results show a high correlation with Wechsler Form I, we now have three scales whose results may be compared.

A continuous research program is carried on, aimed 1) "at testing the tests" we are using, i.e., seeing whether the IQ's and MA's fall into normal distributions by age and grade groups and determining how well these indicators correlate with other evidences of mental ability; and 2) trying out new tests which appear to be suitable for use with the blind with a minimum of changes from the methods used with the seeing.

A collection of tables and curves of results has been assembled which will be interesting to those statistically inclined: copies may be obtained by writing to S. P. Hayes at Perkins, stating the title and number of the sheets desired. Many of the tables will be found useful in interpreting local results, in comparison with the extensive Perkins data. The following table gives an overall picture which shows that the general level of intelligence in this school for the blind is not going down, as some have feared, for all schools for the blind, and that at least in "verbal intelligence" our school population stands at about the same level as seeing school children.

Table 1. Percentages of IQ's of different levels of intelligence

Interim Hayes-Binet tests			Wechsler-Bellevue tests	
Terman groups	Perkins results % of 450 tested	Expected percents	Wechsler groups	Perkins results % of 324 tested
Very superior IQ 138 and over	4.3	2.2	Very superior 128 and above	5.6
Superior 126-137	13.	6.7	Superior 120-127	9.3
High average 116-125	11.8	16.1	High Average 111-119	20.2
Average 92-115	34.	50.	Average 91-110	43.5
Dull normal 80-91	20.6	16.1	Dull normal 79-90	12.7
Borderline 71-79	7.1	6.7	Borderline 68-78	6.5
Mental Deficiency 70 and below	8.7	2.2	Mental Deficiency 67 and below	2.2

In the figures for the Binet tests, the most conspicuous difference from the "expected results" based upon the testing of thousands of seeing children, is the relatively small per cent testing at Average, and the spreading of larger per cents upward and downward. This may well reflect the Perkins policy of retaining superior older pupils for special training and our leniency in accepting doubtful pupils for trial in the kindergarten and early grades. In the Wechsler table we find the same accumulation at the higher levels, but not at the lower levels, probably because we do not give the Wechsler test to children under 10 years of age, so this table does not include the younger, doubtful group.

Besides our satisfactory trial of Form II of the Wechsler test this year, we have been experimenting with an adaptation of the Terman-Merrill 1937 Binet worked out for use with the blind in England by Ivy W. Langan, and published in 1945. This scale differs from the Interim Hayes-Binet in two important points: 1) Miss Langan has introduced a number of performance tests to fill in the gaps made by the necessary omission of visual material and 2) she has standardized her scale on children who are "totally blind or with dark-light sight only." We have been trying to make an unprejudiced study of her performance tests but have run into many of the same difficulties we had with the performance tests included in the 1930 Hayes-Binet and in our attempts at motor skills tests for vocational guidance. We who have visual space perception and can manipulate visual imagery find no great difficulty in an intelligent handling of mazes, patterns, maps and designs. But the perception of shapes and forms through the fingers and the retention and manipulation of the ideas we get through touch seem to involve mental processes very different from those upon which we depend in the intelligent use of words and numbers, and there is a grave question whether performance tests carried on without the help of vision belong in a series of tests of general intelligence, especially when the series is greatly overloaded with purely verbal items. We are hopeful, however, that some of Miss Langan's ingenious devices may prove useful. Her standardization on the basis of blind subjects seems logical, but hardly practical, because such a scale could be used properly with only a small per cent of the children in schools for the blind. As a matter of fact, she has placed all the tests she takes from the Terman-Merrill scale in the same year groups in which they are used with the seeing; which is the same arrangement followed in the Interim Hayes-Binet.

Another research problem upon which we have been putting a good deal of time recently is the question, how we may hope to determine the probable intelligence level of blind babies, for the comfort and assurance of their mothers, and a guide to their proper training. In our revisions of the Binet tests, we had taken over such test items as could be used without vision and labeled them III, IV and V year tests as a basis for the calculation of mental ages, but our school testers have not had a chance to test many preschool children, and we have had no way to estimate the value of the tests. When Dr. Kathryn Maxfield began work at the Arthur Sunshine Home in 1934 we had examined all the developmental scales, but found little material we could use since most of the items depended upon stimulation through the eyes. But when representatives from the Massachusetts Eye and Ear Hospital appealed to us for help in determining the mentality of the considerable number of premature babies with retrolental fibroplasia, we took up the challenge and now for three years we have been making perio-

dic observational records of a considerable group of blind babies by the use of the Maxfield-Field Tentative Adaptation of the Vineland Social Maturity Scale, with encouraging results. This scale contains items in a number of different areas of behavior—general, eating and dressing, communication, occupation and social—arranged in the approximate order of their appearance from birth through the fourth year. No testing of the child itself is involved, but notes are made upon interesting points in the behavior of the child in its home, to supplement the record obtained by asking the mother whether the child at the date of a visit performs this or that item in the list. Much statistical work must yet be done upon the records accumulated, since we do not yet know the numerical value of the varied list of items. But charts already made indicate that as the children grow older most of them get higher scores and we are looking forward to obtaining a scale which will at least indicate about what progress in behavior may be expected of blind babies. The scale can then be used to check the progress of individual babies, and give us a basis for general classifications such as retarded, normal, or above-average development. Ultimately, of course, we would like to hitch this scale to the lower end of the Binet scale, by using both scales upon a considerable number of babies. Up to date, language development has occurred so slowly in many cases that we have not been able to make use of the Binet scale for the blind since it is largely verbal. And the wide variations in secondary factors among the babies themselves make generalizations hazardous: one is also hard-of-hearing, another has to wear braces on his legs and is handicapped in locomotion, several are restrained by over-solicitous mothers, etc. But a number of agencies are cooperating in the study and we are optimistic about the final results.

We are often asked our opinion about the use of group tests of intelligence in schools for the blind. Some of you will perhaps remember that in my Self-Surveys published in 1921, I gave directions for two group intelligence tests, following the technique used with achievement tests, and doubtless many of you are familiar with 1) Miss Ruth Sargent's adaptation of the Otis Classification tests in 1931, 2) Mrs. Fortner's adaptation of the Kuhlmann-Anderson Intelligence Tests in 1938 and 3) the adaptation of the Pintner General Ability tests by the Wisconsin School, in 1944. Such tests are used very widely in schools for the seeing, as they give a quick picture of a whole grade at the beginning of the year, saving much testing time and delay. When used in schools for the blind these tests have given fairly satisfactory correlations with individual tests of intelligence and with group tests of achievement, and may well be used every few years for general survey purposes. But main dependence for the admission, classification and guidance of our pupils must always be upon the results of individual intelligence tests. The group tests are given in Braille, so the small children and the pupils coming from seeing schools could not be tested. Semi-sighted pupils, who are often less skillful with Braille than their blind class-mates are naturally at a disadvantage, and the blind themselves show wide variations in skill because some have been reading Braille longer than others in their grade. In some tests it is necessary to write the answer in Braille, and of course we find variations in this skill also. The slowness of Braille reading causes the same difficulty we find in group achievement tests, and allowing our pupils 2½ or 3 times as long as the sighted makes the tests very long and fatiguing.

Of course the difficulties with Braille can be partly overcome by giving many tests orally, having the pupils mark dot sheets, as explained in our next section, but then other difficulties arise when we attempt to use the seeing norms. A further difficulty arises from the fact that the IQ's obtained from group tests are often conspicuously higher or lower than those resulting from individual tests, and teachers and principals are puzzled to know how to interpret them. Finally, most experienced testers, using individual tests, gain a great many valuable sidelights about the mentality and personality of a pupil with whom they have had an intimate session of an hour or so, and such information is often quite vital in the interpretation of the test results.

2. Achievement tests

a. In grades four to nine.

Last year Perkins used the 10th and last form of the Stanford Achievement test, our custom being to test in the fall all the pupils from the fourth grade (which seemed the lowest grade in which we could expect a sufficient facility with Braille) through the ninth grade. After a survey of available tests, we decided to go over to the Metropolitan Achievement test, and this winter an adaptation of form R was made, introducing some new features, Braille pamphlets were embossed at the Howe Press and arrangements made for a trial of the test in four schools. Results from Overbrook and Perkins indicate that this test will form a satisfactory continuation of the Stanford Achievement test series: practically the same list of school subjects is covered so that profiles can be drawn upon the Stanford Achievement blanks; the pupils' scores show high correlations with their scores on the Stanford Achievement tests; the World Book Company plans to publish a series of new forms, which we expect to adapt and turn over to the American Printing House for distribution on school quota, along with Form R, which we hope to have ready for general distribution this fall. An article will soon appear in the Outlook-Forum giving the results obtained to date, and such special helps in administration and interpretation as seem desirable. The main improvement in technique is the increased use of the oral method, reducing the use of Braille by the pupils and thus aiming at a more direct measurement of attainment in the school subjects, themselves. Results obtained in other schools, with suggestions for further improvement in test technique will be warmly welcomed at Perkins.

b. In the high school

Perkins has made occasional use of high school tests of achievement and is prepared to cooperate in the adaptation of others as part of her research program. We used the Myers-Ruch High School Progress test two years, and found the sections on English, social studies and science suggestive and helpful. We cooperated with the Ohio School in the adaptation of the Sones-Harry High School Achievement test Form A, but have not been able to work it into our test program as yet. Form B is in process of adaptation. We have just used the Scholastic Aptitude Test with our promising juniors for the fourth time, obtaining results for 40 pupils which fall into a distribution similar to one we made from about the same number of scores passed on to us by the N. J. Commission for the Blind. We find these tests very valuable in selecting those students who may safely be recommended for college. Pupils who make high scores are the same ones who obtain high IQ's on the Interim Hayes-Binet tests and do good school work, but their scores in the Scholastic Aptitude test are convincing evidence to use with parents in deciding about college, and those with high scores take with them

proofs of ability which the colleges respect.

3. Aptitude tests

Perkins began last fall the use of the four motor-skill tests upon which Mrs. Mary K. Bauman made a report to the A.A.I.B. Convention in 1946—the Assembly and Disassembly tests of the Penn Bi-Manual Worksample and the Displacing and Turning tests adapted from the Minn. Rate of Manipulation test. Practically the whole of the upper school has been tested and Mr. Sherman, the Principal, has found the results very significant in the educational and vocational guidance of the pupils. We tabulate our results on a chart upon which we have made a distribution of a large number of cases reported by Mrs. Bauman, and judge the individual pupil both on his relative success in comparison to the standard scores for the seeing and to the percentile scores for Mrs. Bauman's group of blind or "usable vision" subjects. Of course we recognize that these tests give us information upon only a few simple manual activities and that it is perhaps better to use the results for monitory purposes rather than for positive prediction: if a boy tests very low on these very simple performances we may well admonish him not to expect easy success in hand work; but it is hardly safe to assume that a boy who tests high will necessarily succeed in a factory, because he may be expected to do things which are much more complicated than the activities of the test and things for which the test activities are not basic. But success in the tests seem to correlate pretty well with the observed motor skill of many pupils, and a number of conspicuously clumsy and inefficient boys have failed badly on the tests, so we feel that we have here one more valuable help in guidance.

4. Interest Inventories

When young people are nearing the completion of their school education and begin to consider what shall be their life work, it is of fundamental importance that they select a vocation in which they will be happy. Interest inventories were invented to explore a wide variety of possible activities and give a picture of a subject's major lines of interest, so that a counselor might consider with the student those vocations which may give him a chance to do the kind of things he likes to do, within the group of vocations which are open to him. Some years ago Dr. Neal F. Quimby adapted for use with the blind the Kuder Preference Record, an interest inventory designed to give a profile of interests in nine areas—Mechanical, Computational, Scientific, Persuasive, Artistic, Literary, Musical, Social Service and Clerical—and provided an ingenious method by which blind subjects could show their choices by pricking answers with a pin, in much the same way that seeing subjects take the test. Last fall we decided to use the Kuder in the upper school at Perkins, and in order to save time by giving the test to groups of pupils, we 1) developed a large dot-sheet upon which the pupils register their choices by marking selected dots with a short pencil in much the same way that they have been taught to mark answers in the Stanford Achievement test, 2) constructed stencil keys for scoring their work, and 3) published in the April 1948 issue of the Outlook-Forum full and detailed directions for giving the tests, along with a table of results obtained at Perkins. Perkins is now ready to sell the new dot-sheets and scoring stencils, with a copy of the Outlook-Forum, at a modest figure. We shall be very glad to receive reports of results from other schools and to assist in their interpretation.

5. Personality "tests"

One must beware of people who speak glibly of personality and its measurement.

Many colleges devote a whole semester course to a discussion of the definition of personality and its place in social relationships; and the enormous number of tests and scales devised to measure this illusive something called "personality," indicates pretty well how complicated and unstable is this side of human nature. Only a few published reports have appeared describing the results of the use of personality scales with groups of blind subjects, but there is no reason why any of the standard scales might not be used in schools, clinics and employment offices, if they are conducted by persons trained to use and interpret them properly. Some changes in content must generally be made to eliminate items not suitable for blind subjects, such as "Would you cross the street to avoid meeting a person you do not like," and precautions must be made to insure privacy of expression. There was almost a riot in one high school group when the pupils were asked to indicate their answers to a series of very intimate personal questions by writing Y for "yes" and N for "no" on their Braille slates, since the pupils could tell how their neighbors were answering by merely counting the dots made by the stylus. (We suggest S for "yes" and O for "no," both letters requiring 3 dotes; or C for "correct" and I for "incorrect," both letters requiring 2 dots.) Since the purpose in giving a personality "test" is not to get an exact numerical result like an MA or IQ, but to bring to the surface social attitudes and tendencies which may be important for the guidance interview, we need not feel disturbed at the minor changes needed when using such scales with blind subjects. But the interpretation of the results obtained may well lead one over into psychiatry and inexpert diagnosis may do more harm than good to the subject.

Any school or agency planning the use of personality tests would be well-advised to look through a critical review of published scales and select the one which best meets the local needs. An excellent general discussion will be found in Personality and the Behavior Disorders edited by J. McV. Hunt, published by Roland Press, N. Y., and probably available in any university library. In volume I, pages 139-251, three chapters are devoted to assessing personality: 1) a chapter on subjective evaluations of personality, including recommendations and application forms, interviews, personality ratings, popularity and group status, and case study methods; 2) a chapter on personality tests, including tests of character, tests of temperament including various self-inventories, tests of attitudes and interests and a long list of measures of specific qualities such as accuracy, aspiration, confidence, consistency, humor, maturity, originality, punctuality, socialability, etc.; 3) a chapter on the interpretation of imaginative productions such as free association, dreams, word association tests, the Rorschach test, the Thomatic Apperception test, play, drawing and painting. An incisive criticism on page 202-3 ends with these words of caution: "Of limited value are those testing techniques which purport to measure the more intimate elements of personality, the unresolved conflicts within the individual, the disturbances resulting from contradictions between personal interest and social standards and the manifold aspects of personality disorganization. The intrinsic complexity of the concepts involved, the semantic problem of avoiding vague and variedly interpreted words and phrases and the difficulty of overcoming resentment toward personal questions introduce elements of uncertainty in the results of such tests. The most dependable application of personality tests is in the study of groups and trends. They are less reliable

when applied to one particular person. Attempts at the construction of an overall test of personality, easily administered and rapidly scored have been disappointing. In view of the extreme complexity of the nature of personality and its susceptability to change, it is not likely that we shall ever have a reliable personality test yielding a Personality Quotient similar to the IQ."

For the interest of this group I have listed references to all the published reports of the use of personality tests with blind subjects so far as I have heard about them, and collected samples of most of the tests used. Additions to this list will be welcomed, as well as brief reports of any tests you have used, and the advantages you feel you have obtained from their use. It might be possible to repeat the same tests at Perkins and make some interesting comparisons. I have added to my samples a tentative adaptation for use with the blind of the Personal Audit which the author plans to administer to blind groups by means of dot-sheets similar to those we are offering for the Kuder Preference Record.

PSYCHOLOGICAL TESTS FOR THE ADULT BLIND IN VOCATIONAL REHABILITATION

MICHAEL J. SHORTLEY, Director
Office of Vocational Rehabilitation
Federal Security Agency

Although the rehabilitation of the blind into regular employment is a difficult undertaking, the national picture shows encouraging results. The Federal-State program of civilian rehabilitation has been increasingly successful, particularly the past few years. During the 1947 year, the latest for which we have final statistics, there were 2,193 blind persons rehabilitated into employment. This figure represents an increase of 64.3 per cent over 1946, and was much better than the increase for the non-blind handicap which was 21.5 per cent. A similarly striking increase is to be noted when we examine the progress which has been made since the amendment of the Vocational Rehabilitation Act in July, 1943. From the year 1935, the first year in which there were separate statistics for the blind, there have been 7,792 blind persons rehabilitated into employment. Of this number, 6,498, or 83.4 per cent were rehabilitated since the passage of the amendment known as Public Law 113, when the scope of the services to be rendered was considerably expanded. The State Agencies and the Federal Office of Vocational Rehabilitation realize that much yet remains to be done in order to meet the needs of the blind. However, the knowledge of the significant progress made in the past should prompt us to make more vigorous efforts in expanding and improving our work.

The success of rehabilitation depends very heavily upon the soundness of the vocational diagnosis. When the evaluation of the client is thorough and accurate, then the vocational plan may be expected to work out to the satisfaction of both counselor and client. Counselors have had to rely largely upon their experience and intuition to improve the vocational diagnosiss. However, the limitations of using experience and intuition are known to all of us. If the counselor can secure objective evidence of the client's mental, me-

chanical and other abilities, the vocational diagnosis should be notably improved. Such objective data can be used to supplement and reinforce the facts obtained from the interview and from the study of the client's background history. The more the work of a counselor may be assisted by scientific devices, the greater measure of success can he hope to attain.

In formulating a clear vocational diagnosis, many sources of data are required. The more certain that we can be of the individual's aptitudes, abilities, interests and personality traits, the fewer the number of errors that will occur. When the vocational appraisal is based upon subjective guesses and unverified hunches, then the rehabilitation plan can succeed more by chance than by intelligent design. Inadequate vocational diagnosis places a strain upon the client's powers of adjustment, and this strain may be more than he could or should carry.

In view of the importance of making a sound vocational diagnosis, all practicable objective methods which assist in this step ought to be incorporated without delay into our daily case work. Today we have available a number of psychological measurements which have proved their value. We have progressed beyonds the position of "to-be-or-not-to-be" about psychological tests. No longer should workers in the field of the blind ask whether psychological tests should or should not be used. The real question is "When should they be used, and which specific ones?" To answer these questions, we should possess knowledge of the tests which are available for the blind, and of the information which they can provide in assisting us to make a correct vocational diagnosis.

The psychological testing of the blind is fraught with many difficulties. For this reason, this service should be provided only by those well versed and trained in the administration, scoring and interpretation of the measurements. Unfortunately, it has come to our attention that persons both, inexperienced and untrained in psychological tests, have attempted to use them with the adult blind. The result invariably has been failure. We recommend without qualification that only competent persons be designated to furnish our agencies with psychological evaluations. The use of these instruments by poorly trained individuals has in a number of cases brought condemnation upon the tests instead of upon those who misused them. It would be just as bad if we condemned the doctor's stethoscope because an amateur did not interpret the significance of the heart beats. Although most people untrained in medicine would hardly think of trying to use a stethoscope and calling themselves physicians, we have seen some amateur psychologists who did not have similar qualms.

Although qualified psychologists can furnish us with satisfactory services, they need time and experience in which to adapt their techniques to the rehabilitation of the blind. We cannot expect to obtain maximally helpful reports from them until they have had an opportunity to orient themselves, and to try out the test adaptations. Moreover, like any other professional group, they must acquire a sufficient knowledge of the purposes of rehabilitation before they understand our team-work approach. There are few psychologists in this country who have experience with the blind. Others must be encouraged to help us in our work. However, we must exercise patience, we must be helpful until they acquire the needed experience. Common consultation between the psychologist, the counselor and the placement specialist is essential. When the psychologist intelligently understands his functions as a member of the rehabilita-

tion team, then faster and surer progress is the natural result.

At present, the battery of tests available for the blind is not as comprehensive as those available for the sighted. However, this does not mean that we should not use the tests which are already at our disposal, or that the tests for the blind are not valuable. Experience and careful experimentation has proved that the vocational diagnosis of the blind will be improved if the currently available psychological tests are used in an expert manner.

In an attempt to give impetus to the use of psychological measurements in the vocational rehabilitation of the blind, the Office of Vocational Rehabilitation prepared a booklet on the subject. This booklet is available by writing to the Office. It has already been distributed to all of our State agencies. The results have been gratifying for in 1947 we noted that 21 out of every 100 blind clients were given psychological testing services. Moreover, some of the agencies have engaged qualified psychologists to furnish services on a per-capita basis. The booklet on available psychological tests for blind adults has been distributed to many psychologists who are becoming interested in the problems of the adult blind. This booklet is designed to be of value to those with and without technical knowledge of test construction, test scores, and interpretation. It gives a description of each test under six headings: Description of the test, evaluative data, basic references in the professional literature, places where materials can be purchased, cost of quantity copies, time to administer, and the application of each test in rehabilitation work. The booklet does not give detailed instructions for administering and interpreting the tests. It does tell where such information may be obtained and where the materials may be purchased.

A discussion of psychological tests for the adult blind should include, at least in general terms, some attention to the instruments now available. Of course, only the briefest kind of treatment may be accorded to the topic in this paper because of the limitations of time. At any rate, we may sketch some of the highlights and sometimes indicate some present lines of progress.

Psychological tests for the adult blind may conveniently, although arbitrarily, be divided into seven fields: intelligence, manual and mechanical abilities, achievement, interests, special aptitudes, and personality.

Intelligence:

Undoubtedly the intelligence test is one of the most helpful in the average rehabilitation case. In some circles, there has been undue emphasis placed upon the limitations of the I. Q. with a consequent oversight of the greater limitations of estimating intelligence from the school history and the interview. The intelligence test is particularly helpful in measuring the person's abilities to adjust to life and to do work on professional, semi-professional, skilled or unskilled levels.

In testing the intelligence of the adult blind, the individual mental ability test of the verbal type has proved to be the most satisfactory. The Verbal part of the Wechsler-Bellevue Adult Intelligence scale, both Forms I and II, has been the most accepted single instrument. The Interim Hayes-Binet, adapted by Dr. Hayes of Perkins Institution who has done the most extensive work in this area, can be used as an alternate test with individuals who have been coached on the Wechsler-Bellevue.

Manual and Mechanical Abilities:

This area of ability-measurement is of particular importance in dealing with adult blind clients who are being consid-

ered for industrial work and who must use substitutive activities to compensate for the loss of vision. The most productive effort in this area has been the work of Mrs. Mary K. Bauman of Philadelphia. She tried out on the adult blind a number of manual ability tests which had long been used with the sighted. On some of the tests, the blind compared unfavorably as a group with the sighted but it was found that two very well known manual ability tests could be of value if they were modified to some degree. Accordingly, the Minnesota Displacing and Turning tests, and the Pennsylvania Assembly and Disassembly tests were standardized and validated. The revision included (1) more practice trials for the blind; and (2) it minimized the number of reaching movements for materials in different positions on the work-surface. Both of these factors are very important reasons why the blind as a group make lower average scores than the sighted on these and particularly on other manual tests which were tried out. However, some blind clients can do as well and better than the average sighted person, and these individuals can make good industrial placements if all other factors are favorable to that vocational objective.

Achievement:

It has been customary to think of achievement tests as applying only to school situations. However, educational achievement has important implications to the proper selection of a vocational goal. Thus, if a client has a high degree of skill in mental arithmetic, then he can be considered for jobs involving such a requirement. Moreover, there are countless jobs which involve the use of good English, the ability to comprehend written or oral instructions, the ability to spell, the knowledge of mechanical principles, and the like.

To measure such achievement, there are a large number of tests which may be used. The tests may have the same content but may be printed in different forms. Some are published in large-type for clients with ssufficient vision to take paper-and-pencil tests; others are published in Braille for those proficient in this reading skill. It is especially important to note that a very large number of achievement tests intended for paper-and-pencil administration with the sighted may be given o the blind in an oral manner. Under these conditions, the time limits of the test must be changed as they are required in the original standardization. Nevertheless, the individual who understands the theory and makeup of psychological tests may make useful interpretations of the results which take into consideration the changed conditions of administration.

Interests:

Counselors work with a number of clients in whom the pattern of interests is difficult to ascertain. At times, considerable interviewing time is spent in an attempt to establish a field or focus of interests. With such cases, it is helpful to administer an interest inventory. As a general rule, the younger adult is more likely to benefit by the administration and interpretation of the interest inventory than older people.

In the past, interest inventories have been administered orally to blind clients in daily rehabilitation work, although the counselors who used them had no experimental verification of their validity to the blind. However, two studies have appeared in the recent professional literature on the use of interest inventories with the blind. Although there is considerable experimentation yet required in this area, the results have been most promising. In one study Dr. Quimby adapted

the Kuder Preference Record to the blind by changing a number of items on the test and administering the test to adolescent students. Dr. Hayes of Perkins used the same adaptation but devised a new method of marking and scoring the results. Both investigators expressed their satisfaction over the results and stated that the interest invenory had been of assistance in the counseling of their blind clients.

Special aptitudes:

This is one of the areas in which there is room for considerable research. Under the available measurements of special aptitudes, we can count musical ability tests and tests in proficiency to read Braille. The Seashore Measures of Musical Talents can be administered to the blind, if necessary, on an individual basis. However, most young adults who come to our attention and who are interested in music as a vocation, probably are better evaluated by competent music teachers in their specialty than by the tests. The tests which measure level of reading proficiency in Braille are satisfactory, but they are seldom used with clients in the adult age ranges.

Personality:

Recently a study by O. H. Cross has been reported in the literature on the adaptation of the Minnesota Multiphasic Personality Inventory to blind adult men and women. He found that the blind did not make materially different scores from the sighted. (Some sex differences appeared on the men, but not the women. Blind women made average scores much alike those of sighted women. However, blind men made scores which were elevated above those of the sighted on the scales of depression, masculinity-femininty, psychasthenia, and hypomania.)

The Minnesota Multiphasic Personality Inventory has been adapted by Mr. S. Potter of the Minnesota Rehabilitation Agency on a wire recorder. This adaptation makes it possible for the blind person to listen to the items, and to answer without any constant supervision by the psychologist. It is only necessary to help the client start the test, then to leave him alone until he makes it known that he is finished. This procedure saves the time of the examiner who otherwise would have to read the items orally.

A beginning is also being made in the use of projective personality tests with the blind. It is hoped that these tests will enable us to determine the basic personality structure of the adult blind, just as the Rorschach Ink-Blot Test (and the Murray Thematic Apperception test) now does with the sighted. The most promising instrument for use with the blind, as yet in the experimental stage, is the Sargent "Test of Insight into Human Motives." This personality test has been the subject of study by Mr. W. W. Morris, formerly of the staff of the University of Michigan, Bureau of Psychological Services, Institute for Human Adjustment. The Sargent test may prove to be a valuable addition to the psychologist's battery of measuring devices, and may be particularly helpful in disclosing some of the contents of the sub-conscious mind.

In vocational rehabilitation, we must employ highly individualized procedures since each client has his own pattern of distinctive abilities, interests, and personality. The approach in psychological testing is one of individual testing, rather than the group procedures used in schools. The test results are valuable for the opportunity which they afford to compare an individual's performance with a large population. However, if the testing time yields only test scores, then we believe that a large part of their value has not been utilized. Of equal significance is accurate observation of the qualitative aspects of

the blind adult's performance by a competent phychologist during the testing period. When the client is confronted with the pressure demands of a test, then we may see for the first time aspects of his behavior which have an important bearing upon his employability. These observations indicate some of his work habits, his method of reacting to stress, his mode of approach, and his ability to adapt rapidly to new situations. These facts cannot be obtained during the counseling interview when the atmosphere is a friendly, helpful and non-demanding one. Careful recording should be made of the client's behavior before, during and after the testing proper. The observations give good clues to personality characteristics.

The outlook for progress in psychological services for the adult blind in vocational rehabilitation appears most promising. Not only are more clients being tested for basic aptitudes and abilities today, but there appear signs of productive research in this area. In this regard, we feel that a notable event took place last November when a national institute was held at Ann Arbor, Michigan, on the Psychological Diagnosis and Counseling of the Adult Blind. The meeting was sponsored by the University of Michigan, in cooperation with the Michigan Division of Services for the Blind, and the Office of Vocational Rehabilitation. This was the first national conference of its kind. Among the 109 persons in attendance were representatives of all the leading national, public and private agencies for the adult blind, and several universities. The proceedings were deemed to be so significant that plans have been made to publish them through the joint cooperation of the University of Michigan, the Office of Vocational Rehabilitation, and the American Foundation for the Blind. This publication will be printed most probably by the fall of this year, and can be purchased from the American Foundation for the Blind.

Another important result of the national conference is the movement to constitute a national committee to encourage, coordinate and possibly direct research into the problems of the adult blind, psychological and otherwise. This committee has not yet been formally constituted but plans are in progress and it is hoped that the committee may begin its work by the end of this summer.

The rehabilitation problems of the blind are difficult. Many professions must be invited and encouraged to give their assistance. Careful research can supplement the findings of experience, perhaps even spearhead the attempts to improve the effectiveness of our mthods of assisting the adult blind. Psychological measurements furnish us with useful tools to help in the vocational diagnosis of the individual. We must learn to increase their value through experience and we must encourage psychologists to conduct further research in solving the many perplexing problems which still confront us.

The vocational rehabilitation program for the blind is an undertaking which has important personal and social values. It should attract more attention and respect from all segments of the national population, particularly of professional groups. Even from the few statistics on the 1947 rehabilitated blind group, we can see what the services have meant to the individual and to society. Thus, we found that the average age of blind clients was 33, and the average education was eighth grade. Non-handicapped people of similar education should have established themselves in employment no later than age 21. It will take time before the blind group can catch up, but they now have many years of productive life before them, and they can live them usefully. At the time of application, the group was very

short on occupational experience because 49 per cent either had never worked at all or had extremely limited work experience. Now they are securing the work experience which will bring seniority rights and chances at higher salaries and promotions. At first contact, seventy per cent of the clients were dependent upon others for support either partially or totally. Now they are largely self-suporting and independent. Before rehabilitation, the average income was $4.70 a week per person; at the time of closure this was increased to $26.10. In other words, these blind individuals now have a proper chance to attain personal happiness. Moreover, society can count upon them to produce and purchase goods, to support themselves, and to take their place among the responsible citizens of our nation.

BIBLIOGRAPHY

M. K. Bauman, Studies in the Application of Motor Skills Techniques to the Vocational Adjustment of the Blind, Journal of Applied Psychology, April 1946, 30:144-154.

Orrin H. Cross, The Braille Edition of the Minnesota Multiphasic Personality Inventory for Use With the Blind, Journal of Applied Psychology, April 1947, 31:189-198.

S. G. DiMichael, Psychological Tests for Use With Blind Adults in Vocational Rehabilitation. Office of Vocational Rehabilitation, Federal Security Agency, Washington 25, D. C. May, 1947.

Samuel P. Hayes, Contributions to a Psychology of Blindness, N. Y. American Foundation for the Blind, 1941.

Samuel P. Hayes, Alternative Scales for the Mental Measurement of the Visually Handicapped, Outlook for the Blind, 1942, 36:225-230.

Samuel P. Hayes, A Second Test Scale for the Mental Measurement of the Visually Handicapped, Outlook for the Blind, 1943, 37:37-41.

Samuel P. Hayes, Vocational Aptitude Tests for the Blind, Watertown, Mass., Perkins Institution and Massachusetts School for the Blind, February 1946.

Samuel P. Hayes, An Interest Inventory for the Educational and, Vocational Guidance of the Blind, Outlook for the Blind.

Neal F. Quimby, The Vocational Interests of Blind High School Students, Outlook for the Blind, 1944, 38:127-129.

V. S. Sommers, The Influence of Parental Attitudes and Social Environment on the Personality Development of the Adolescent Blind, New York: American Foundation of the Blind, 1944, pp. 124.

BUSINESS MEETING

Thursday Afternoon, June 24

The meeting was called to order by President W. E. Allen, Chairman, at 2:30 p.m.

The Chairman called for the report of the Credentials Committee from Chairman Edward M. Tillinghast, Arizona.

(Mr. Tillinghast read the report.)

Mr. Joseph J. Kerr, Acting Secretary, appointed by the Chairman for Josef G. Cauffman, Secretary, read the Executive Committee report.

The report of the Auditing Committee was presented by the Chairman, John W. Eakes, Mississippi.

The report of the Resolutions Committee was made by the Chairman, E. N. Peeler, North Carolina.

The report of the Committee on Nominations was presented by Dr. A. L. Brown, Colorado.

The above reports were accepted.

It was moved by Alfred Allen, duly seconded and carried, that the A.A.I.B. express its grateful thanks to all of its officers and to all the members of the committees who have served the association so faithfully and well during the past two years.

It was moved by B. S. Joice, duly seconded and carried, that the minutes and papers of the Convention be compiled

and the PROCEEDINGS published as usual.

The new president, Francis M. Andrews, Baltimore, made a brief acceptance speech, stating he would carry on the work of the association to the best of his ability.

An invitation was extended by Acting Secretary Joseph J. Kerr to the association to hold its Fortieth Convention in 1950 at the Overbrook School for the Blind.

A meeting of the new Executive Committee was called to be held immediately following the adjournment of the business meeting.

The business meeting was adjourned for two years at 3:15 p.m.

JOSEPH J. KERR
Acting Secretary.

REPORT OF THE CREDENTIALS COMMITTEE

(List of the Delegates present)

EDWARD W. TILLINGHAST, Chairman,
Arizona

Superintendents

Carl D. Monroe, Alabama School for the Blind, Talladega, Ala.

E. W. Tillinghast, Arizona School for the Deaf and Blind, Tucson, Ariz.

J. M. Woolly, Arkansas School for the Blind, Little Rock, Ark.

A. L. Brown, Colorado School for the Deaf and Blind, Colorado Springs, Col.

Frank Johns, Jr., Connecticut School for the Blind, Hartford, Conn.

C. J. Settles, Florida School for the Deaf and Blind, St. Augustine, Fla.

John S. Herndon, Georgia Academy for the Blind, Macon, Georgia.

C. R. K. Allen, Halifax School for the Blind, Halifax, Nova Scotia.

L. J. Flood, Illinois School for the Blind, Jacksonville, Ill.

Robert Lambert, Indiana School for the Blind, Indianapolis, Ind.

Carl Gernetzky, Iowa School for the Blind, Vinton, Iowa.

Paul J. Langan, Kentucky School for the Blind, Louisville, Ky.

Francis M. Andrews, Maryland School for the Blind, Overlea, Md.

J. C. Lysen, Minnesota Braille and Sight Saving Classes, Minneapolis, Minn.

John Eakes, Mississippi School for the Blind, Jackson, Miss.

Robert H. Thompson, Missouri School for the Blind, St. Louis, Mo.

W. C. McMillen, Nebraska School for the Blind, Nebraska City, Neb.

Neal F. Quimby, New Mexico School for the Blind, Alamogordo, N. M.

E. N. Peeler, North Carolina School for the Blind and Deaf, Raleigh, N. C.

W. G. Scarberry, Ohio State School for the Blind, Columbus, Ohio.

V. R. Carter, Oklahoma School for the Blind, Muskogee, Okla.

Joseph J. Kerr, for Josef G. Cauffman, Overbrook School for the Blind, Philadelphia, Pa.

Allen W. Sherman for Gabriel Farrell, Perkins Institution, Watertown, Mass.

Mrs. Carmona de Verdiales, Institute for Blind Children, Santurce, Porto Rico.

S. VanVoorhis, South Dakota School for the Blind, Gary, S. D.

W. E. Allen, Texas School for the Blind, Austin, Texas.

Joseph E. Healy, Virginia School for the Deaf and the Blind, Staunton, Va.

Mrs. Marion H. Grew, Washington School for the Blind, Vancouver, Wash.

B. S. Joice, Western Pennsylvania School for the Blind, Pittsburgh, Pa.

Supervisors and Directors

Alfred Allen, Assistant Director, American Foundation for the Blind, New York, N. Y.

F. E. Davis, Superintendent, American Printing House for the Blind, Louisville, Kentucky.

Francis J. Cummings, Executive Director, Delaware Commission for the Blind, Wilmington, Del.

Josephine F. Taylor, Director of Education, New Jersey Commission for the Blind, Newark, N. J.

Board Members

Mrs. Florence W. Robbins, New York State School for the Blind, Batavia, N. Y.

Teachers

ALABAMA SCHOOL FOR THE BLIND, Talladega, Ala.
Rebecca Bartlett
Mrs. W. C. Dowdell
Gussie Mae Snider

ARKANSAS SCHOOL FOR THE BLIND, Little Rock, Ark.
Mary Harper
Eugene Hartman
Eula Shults

CALIFORNIA SCHOOL FOR THE BLIND, Berkely, Cal.
Charles Buell
Mrs. Charles Buell

COLORADO SCHOOL FOR THE DEAF AND BLIND, Colorado Springs, Col.
Charles E. Kaufman

IDAHO STATE SCHOOL FOR THE DEAF AND BLIND, Gooding, Idaho.

SUMMARY

Superintendent Delegates	29
Supervisors and Directors	4
Board Member Delegates	1
Teacher Delegates	60
Honorary Members	103
Foreign Delegates	10
Total	207

Chairman—Edward W. Tillinghast, Arizona; V. R. Carter, Oklahoma; Laurens Walker, South Carolina.
Mrs. Deana Hill

ILLINOIS SCHOOL FOR THE BLIND, Jacksonville, Ill.
George W. Gerlach
Fred G. Meyers
Mrs. Mabel G. Meyers

INDIANA SCHOOL FOR THE BLIND, Indianapolis, Ind.
S. M. Whinery

IOWA SCHOOL FOR THE BLIND, Vinton, Iowa.
Georgie Lee Abel
Alma Reid
Lauretta Rice

KANSAS SCHOOL FOR THE BLIND, Kansas City, Kan.
D. W. Overbeay
Helen W. Smith

KENTUCKY SCHOOL FOR THE BLIND, Louisville, Ky.
M. Blye Allen
Martha C. Schneider
Margaret S. Traub

LOUISIANA SCHOOL FOR THE BLIND, Baton Rouge, La.
Paola Meaux

MARYLAND SCHOOL FOR THE BLIND, Overlea, Md.
Beatrix Baird
Hugh Johnson
Martha Winget

MISSISSIPPI SCHOOL FOR THE BLIND, Jackson, Miss.
Miriam Hollis
Lucy Roberson

MISSOURI SCHOOL FOR THE BLIND, St. Louis, Mo.
Mrs. Betty Carpenter
Mrs. Ina E. Hubbard
Joanna Levitt

NEBRASKA SCHOOL FOR THE BLIND, Nebraska City, Neb.
Anita Oleigs

NEW MEXICO SCHOOL FOR THE BLIND, Alamogordo, N. M.
Mrs. Rodella Binder
Ruby Brown
Harry J. Ditzler

NEW YORK STATE SCHOOL FOR THE BLIND, Batavia, N. Y.
Dorothy Parker

NORTH CAROLINA SCHOOL FOR THE BLIND AND DEAF, Raleigh, N. C.
Mrs. Ethel Lewis
T. E. Stough

CLEVELAND, OHIO, BRAILLE CLASSES (PUBLIC SCHOOLS), Cleveland, Ohio.
Harriet E. Totman

OKLAHOMA SCHOOL FOR THE BLIND, Muskogee, Okla.
Grace Davenport
Blanche Dougherty
Tennie M. Lee

OVERBROOK SCHOOL FOR THE BLIND, Philadelphia, Pa.
Margaret J. Maxson
Helen Louise Wood

PERKINS INSTITUTION, Watertown, Mass.
Helena Drake
B. F. Smith
E. J. Waterhouse

PORTO RICO SCHOOL FOR THE BLIND, Santurce, Porto Rico.
Aida Freira
Beatrice Lassalle

TEXAS SCHOOL FOR THE BLIND, Austin, Texas.
Maude Cartledge
Lena L. Lewis
F. G. Tacquard

UTAH SCHOOL FOR THE DEAF AND THE BLIND, Ogden, Utah.
Harold W. Green

VIRGINIA SCHOOL FOR THE DEAF AND THE BLIND, Staunton, Virginia.
W. E. Burrows
W. T. Heisler
Mrs. W. F. Hiner

WASHINGTON STATE SCHOOL FOR THE BLIND, Vancouver, Wash.
Mrs. Hazel Harsh
Velma Powers
Dorothy Rodgers

WISCONSIN SCHOOL FOR THE BLIND, Janesville, Wis.
H. Alton Davis

Honorary Members

ALABAMA
Robert Conner
Mrs. Carl D. Monroe
Carl Monroe, Jr.

ARKANSAS
Rose Fussell
Bernice Grantham
Alva Howard
Jeanne Mitchell
Raymond Sykes

FLORIDA
Mrs. C. J. Settles
C. W. Settles, Jr.

HALIFAX
Mrs. C. R. K. Allen

ILLINOIS
Emma Gerlach

INDIANA
Mrs. S. M. Whinery
Ruth Whinery

IOWA
Anna May Sansom

KANSAS
Mrs. D. W. Overbeay

KENTUCKY
Marjorie S. Hooper
Mrs. Hazel Judd
Louise Larkin
Samuel J. Richie
Edith Ries

MARYLAND
Richard Andrews
Lois Cox
Jayne Roof
Kathleen Stewart

MASSACHUSETTS
Mrs. Vesta Coon

Mrs. J. S. Davis
Mrs. Mary L. Hunt
Edward W. Jenkins
Mrs. E. W. Jenkins
Betty Nye
Edwardo Ordonez
Mrs. B. F. Smith
Mrs. Perley C. White

MISSISSIPPI
Pauline Beasley
Reve Stewart

MISSOURI
Lester Best
Mrs. L. Best
Robert Best
Ella Koch
Edith Smith
Gretchen Traubitz

NEBRASKA
Mrs. W. C. McMillen

NEW MEXICO
Mrs. Harry Ditzler
Dorothy Ellis
Alexander McNab
Mrs. A. McNab
Clara Miller
Mrs. Neal Quimby
Edwina Rickel
Cecil Terry
Mrs. Cecil Terry

NORTH CAROLINA
Mrs. T. E. Stough

OHIO
Beatrice Green
Brenda Green
Mrs. W. G. Scarberry
E. R. Steece
Mrs. E. R. Steece
Connie Steece

OKLAHOMA
Mrs. V. R. Carter
Mrs. Myrtle Coffey
Betty Duncan
Mrs. Edith Holt
Gene O'Bar

PENNSYLVANIA
Mae Davidow
Frances Davidow
Helen Richman

NEW YORK
Hulen C. Walker
Mrs. H. C. Walker

SOUTH DAKOTA
Mrs. S. VanVoorhis

TEXAS
Governor Beauford H. Jester
Chairman Hall H. Logan, Texas State Board of Control
Mrs. W. E. Allen
Mrs. Tacy Albright
Beulah Beaver
Ione Biggs
Elizabeth Caldwell
Clara Carlyle
Christine Crouch
J. W. Derr
Mrs. G. A. Hagood
Mrs. Betty Jo Hampton
Mrs. Louise Hancock
Mrs. Martin P. Hingle
F. E. Lewis
Mrs. Florence Jean Long
Mrs. Vick R. McDowell
Stanton McKinley
Frances Malmberg
Florrie Matyear
Mrs. Nancy Linden Smith
Caroline Stell
Minnefred Taylor
Mrs. W. D. Voiers
Mrs. Mary Wynn
Charles R. Young
Robert Young

UTAH
Mrs. H. W. Green

VIRGINIA
Mrs. Kate Davis
Edna Baughman
Molissia Taylor

WASHINGTON
Emil Fries

WISCONSIN
Gerald Atkins

FOREIGN DELEGATIONS

Monterrey, N. L., Mexico.
Professor Alejandro Martinez Paes
Professora Gloria Gomez Garcia
Professora Maria de la Luz, Ganza
Professora Florentina Velazguez
Professsora Maria Antonia Garza
Professora Maria Luisa Martinez Paes

Panama
Srt. Angela Arrue

Mexico City
Professor Eugenia Cortes

Venezuela
Anrazatr Florantin
Mrs. Anrazatr Florantin

FOREIGN DELEGATIONS

Panama
Srt. Angela Arrue

Mexico City
Professor Eugenia Cortes

Venezuela
Anrazatr Florantin
Mrs. Anrazatr Florantin

REPORT OF THE EXECUTIVE COMMITTEE

A meeting of the Executive Committee of the A.A.I.B. was held in the office of President W. E. Allen, Superintendent, Texas School for the Blind, on Monday evening, June 21, 1948, at 9:30 p.m., Dr. Quimby presiding.

Those present were: President W. E. Allen, First Vice-President Francis M. Andrews, Second Vice-President F. E. Davis, Acting Secretary J. J. Kerr, Chairman Executive Committee, Neal F. Quimby, Allan W. Sherman, John C. Lysen, and Mrs. Mercedes Carmona de Verdiales.

The minutes of the meeting of the Executive Committee held at Perkins on June 27, 1946, and the minutes of the meeting held at Baltimore on July 8, 1947, were approved.

Approval was given to a bill for $6.95 submitted by J. C. Lysen, and for one in the amount of $5.75 for correction notice in programs.

It was moved by Mr. Andrews and seconded by Mr. Sherman that the chairmen of the sectional meetings be appointed by the Chairman of the Executive Committee for the next biennium. It was unanimously carried.

A check up of the delegates was made, and of the Committee Chairmen present, and arrangements were made for carrying on the Convention program.

There being no further business the meeting adjourned.

JOSEPH J. KERR
Acting Secretary.

REPORT OF THE AUDITING COMMITTEE

The Auditing Committee of the American Association of Instructors of the Blind certify that the books of Josef G. Cauffman, Treasurer, have been examined and found to be correct and in order.

JOHN EAKES, Chairman
J. M. WOOLLY
FRANK JOHNS, JR.
JOSEPH J. KERR.

REPORT OF THE RESOLUTIONS COMMITTEE

BE IT RESOLVED: That we highly commend and thank President William E. Allen for the efficient and genial manner in which he has conducted the sessions of this convention and that both he and his good wife, Mrs. Allen, be warmly complimented for the arrangements for the comfort and happiness of their guests. The lodging, the food, and the general arrangements have been most excellent and satisfactory.

BE IT FURTHER RESOLVED: That our thanks be extended to the entire staff of the Texas School for the fine entertainment they have provided, and for their efficient, gracious and cheerful helpfulness which have contributed so greatly toward making this a successful and happy convention. The decorations, the unusual recreational entertainment, the convenience of the concession stand and many other courteous and outstanding activities of the staff members have contributed toward making this a pleasant, worthwhile and memorable convention.

BE IT FURTHER RESOLVED: That the appreciation and thanks of the convention be extended to the harp ensemble from the Texas School of Fine Arts for its excellent and delightful music; to the speakers from the University of Texas for their instructive and inspiring addresses; to Governor Beauford Jester for his appearing on our program and so emphatically expressing his deep and active interest in our work.

BE IT RESOLVED: That the convention express its regret and sympathy because of the illness of Mrs. Josef G. Cauffman which has prevented her and our efficient secretary from attending this meeting and that we hope for the speedy and complete recovery of Mrs. Cauffman.

WHEREAS the Congress of the United States is now considering amendments to the Social Security Act, including broader coverage under the Act, and including also a provision for disability coverage which would, in the event of permanent disability of any worker in a covered occupation, entitle him to immediate benefits under the Act not otherwise available to him until the age of 65;

AND WHEREAS Industry, Labor and Agriculture, as represented by the National Association of Manufacturers, the American Federation of Labor, the Congress of Industrial Organizations and the National Grange, have all indicated their endorsement of such disability coverage under the Social Security Act;

NOW, THEREFORE, BE IT RESOLVED that the American Association of Instructors of the Blind, in convention assembled at Austin, Texas, this 24th day of June, 1948, place itself on record as favoring disability insurance, and requesting that the insurance cover blindness as well as other disabilities, so that a person shall be entitled to the benefits of the Social Security Act immediately upon the onset of blindness, regardless of his attained age, to the end that he may become, in the event of blindness, a beneficiary of a comprehensive insurance plan rather than a recipient of public assistance.

Amendment—BE IT FURTHER RESOLVED, that copies be sent to the members of Congress and other agencies interested in this action.

In as much as the **Austin American** and the **Austin Statesmen** have cooperated in giving the Thirty-ninth Biennial Convention of the American Association of Instructors o fthe Blind excellent coverage;

And, in as much as Miss Lorene Barnes, representing jointly the above-named pa-

pers, has faithfully and accurately served as liaison editor for the conference,

BE IT HEREBY RESOLVED, that we express our oppreciation to Miss Barnes and her associates for their services during the days of this conference.

COMMITTEE ON RESOLUTIONS
Egbert N. Peeler, Chairman
Merle E. Frampton
Robert Lambert
Spencer Phillips
W. G. Scarberry.

REPORT OF THE NECROLOGY COMMITTEE

This is not one of the reports a committee is happy to make to its convention. However, the need for it is perennial. It is one of the sacred duties of our Association to pause in each convention and pay our tribute to those who have finished their work in our profession and its related endeavors.

We do so with appreciation for their guiding light, respect for their devotion and idealism, gratitude for their accomplishments, and a deep sense of humility regarding our adequacy to carry on without them.

Added to those from previous years are:

From Schools for the Blind

ALABAMA

Alabama Institute for the Deaf and Blind

Dr. H. G. Dowling, President, 2 years, died May 21, 1948.

ARIZONA

Arizona State School for the Deaf and Blind

Governor Sidney P. Osborn, ex-officio member of the Board of Directors, 8 years in work for the blind, died May 25, 1948. Governor Osborn was one of the outstanding governors of the State of Arizona and was serving his fourth term. As an active member of the Board of Directors he was greatly interested in the work of the Arizona School and in the welfare of the adult blind of the state.

CONNECTICUT

Connecticut School for the Blind

Miss Amy H. Augur, teacher of English and French, 5½ years in work for the blind, died January 3, 1948. Miss Augur died suddenly. Her death has been a great loss to the pupils and faculty of the school.

FLORIDA

Florida School for the Deaf and the Blind

Miss Maude Green, housemother over the primary blind boys, passed away December 15, 1947, in Flagler Hospital. Miss Green was connected with the school for twenty-three years. She was born in Jacksonville, Alabama, October 19, 1886. She began her work as a housemother in the Florida School, November 8, 1925. She was unusually successful as a housemother and exerted a splendid Christian influence over the children who passed under her guidance.

GEORGIA

Georgia Academy for the Blind

Miss Emma Jones, retired, Braille teacher, 55 years in work for the blind, died April 21, 1948. After having been a student at the Georgia Academy for the Blind for ten years, "Miss Emma" was employed as a teacher in 1883 and was retired in 1938, serving more than a half century in the interest of the blind. She was patient and persevering in everything that she did for the blind. Hundreds of blind boys and girls in Georgia who studied under her revere her memory. "Miss Emma's" Christian influence will continue to live throughout the years to come.

ILLINOIS

Illinois School for the Blind

Robert W. Woolston, teacher and superintendent for 41 years, died October 15, 1947. Superintendent Woolston became a recognized authority in the education of the blind. Many advancements in methods were introduced during his long administration of the school. Many improvements were made in the physical plant, especially the construction of five cottages, a dining-kitchen-cold storage unit, the power plant, the swimming pool, and additions to the hospital. Mr. Woolston was a past president of the American Association of Instructors of the Blind and a member of the board of the Mary Bryant Home for Blind Women. He was born in Onawa, Iowa, October 29, 1875. He was graduated from Wheaton College and attended the University of Chicago, Northwestern University and the University of Iowa. He was first appointed to the position of high school teacher at the Illinois School in 1903 and was appointed superintendent in 1911. In Mr. Woolston's passing the blind people throughout Illinois and the nation have suffered a severe loss.

KANSAS

Kansas School for the Blind

A. R. Bartholomew, 10 years teacher of Social Science, died September, 1947.

MARYLAND

Maryland School for the Blind

Mrs. Jennie E. Harman, housemother, retired, 30 years in work for the blind, died May 10, 1947. Mrs. Harman will long be remembered by those who lived in her cottage and those who worked with her. She was a wonderful mother to many boys. They felt free to go to her with their problems and troubles. They sought her advice. She gave long, faithful, loyal service to the school.

Miss Mattie W. Owens, teacher, retired, 14 years in work for the blind, died in 1947. Miss Owens had to give up teaching in 1939 due to ill health. The pupils liked her for she was full of fun and devoted to her work. She often visited the school after she left as she was always interested in what the pupils were doing.

William T. Shackelford, member of the Board of Directors, engaged in work for the blind for 27 years, died October 22, 1947. When a man reaches the age of ninety-one and rarely misses a day at the office, and believes that since he is a member of the Board of Directors he should always attend their meetings, that man is truly a man interested in his work and his activities outside of his business. That was William T. Shackelford, a true and loyal friend of the blind, devoted to his responsibilities in helping the cause of the blind. It was a privilege to have known him.

MASSACHUSETTS

Perkins Institution and Massachusetts School for the Blind

Mrs. Homer (Mabel Knowles) Gage, trustee 15 years, died May 16, 1948. Mrs. Gage was a valued trustee of Perkins for fifteen years, and took great personal interest in the teachers and pupils. She was also actively interested in the Worcester Home for the Blind in her home city and was one of the leading officers of the National Braille Press. To all of these organizations for the blind, Mrs. Gage gave generously, and left bequests in her will.

Dr. Anna G. Newell, teacher of biology, Upper School, 1 year, died July 7, 1947. Dr. Newell was for many years the professor of biology at the Moravian College in Bethlehem, Pennsylvania. Retirement age plus defective vision brought her to Perkins where she became a member of the Harvard Class and taught biology. Her deep scholar-

ship, charming manner and gracious personality endeared her to the school during the one year she was here, and all had looked forward to her continuance as a member of the Perkins staff.

Mrs. Martha Fox Smith, teacher in Lower School, 5 years in work for the blind, died July 17, 1946. Mrs. Smith entered the Harvard Class after her graduation from Smith College in 1938. With the exception of one year, which she and Mr. Smith spent at the Washington State School of which he is a graduate, Mrs. Smith continued as a teacher at Perkins until her death. Mrs. Smith was one of the most valued teachers in the Lower School.

NEW YORK

New York Institute for the Education of the Blind

Miss Frieda Glucksman, teaching fellow, 2 years in work for the blind, died in November, 1947.

Mrs. Alta Rausch, secretary to the principal, 14 years in work for the blind, died March 21, 1948.

New York State School for the Blind

Jesses Yerman, principal account clerk, 40 years in this field, died January 15, 1948.

PENNSYLVANIA

Overbrook School for the Blind

Miss S. Gertrude Reess, retired teacher of music, in the work 42 years, died September 30, 1946.

Western Pennsylvania School for the Blind

Hon. Joseph Buffington, corporator for 38 years, died in September, 1947.

I. D. Metzger, M. D., corporator for 33 years, died in April, 1947.

Guy H. Nickeson, executive director of Pennsylvania Association for the Blind, 28 years in work for the blind, died January 18, 1948. Mr. Nickeson graduated from Western Pennsylvania School for the Blind in 1910, later became field worker and placement agent for this institution. Became executive secretary of the Pennsylvania Association for the Blind in Pittsburgh in 1944. Was treasurer of the American Association of Workers for the Blind.

SOUTH DAKOTA

South Dakota School for the Blind

Miss Gladys Elaine Woodbury, head of music department and teacher, 29 years in this work, died March 1, 1947. Miss Woodbury came to the School for the Blind in September, 1918, and continuously held the position of music teacher and head of the music department until her death. She was a devoted teacher and served her pupils unselfishly during all 29 years. This was the only teaching position she ever filled, as she came here in 1918 after preparing herself in the New England Conservatory of Music for a music career. She was also a devout Christian and served the Methodist Church as choir leader and pianist for many years. This Church, in remembrance of, and for her service, is raising a fund to purchase an electric organ as a memorial.

From Organizations for the Blind

CANADA

Canadian National Institute for the Blind

John A. McDonald, LL.D., superintendent, Quebec Division, in the work over 40 years, died September 12, 1947. Sightless himself for most of his life, Dr. MacDonald bent all his efforts to improving the lot of other Canadians with the same handicap. His connection with the education and rehabilitation of the blind began in the Halifax School for the Blind, prior to the organization of The Canadian National Institute for the Blind. He joined the Institute in its early years and played a leading part in the organization of the Maritime, Western and Quebec Divisions.

Sherman Charles Swift, M.A., LL.D.,

chief librarian, engaged in work for the blind 38 years, died May 27, 1947. Blind since childhood, Dr. Swift was the key person in library work for the blind in Canada, and was one of the founders of the Canadian National Institute for the Blind in 1918. Dr. Swift had been an active member of the Library Committee of the American Association of Workers for the Blind, and served the American Printing House for the Blind as proof reader for Braille literature in Spanish, French, German and Latin. He was the founder and editor of the Canadian National Institute's Braille publication "The Courier." Dr. Swift was co-author with the late T. G. Marquis of a special quarter-centenary work, "The Voyages of Jacques Carties in Prose and Verse," published in 1934.

Roy P. Thompson, executive officer, Southern Alberta, retired, in the work 17 years, died January 25, 1948. Known throughout Canada for his service to the blind, Roy Thompson died in Calgary, Alberta, after a lengthy illness. He was an executive officer for the Canadian National Institute for the Blind for seventeen years. Born at Thedford, Ontaria, Mr. Thompson entered the banking business and worked in Saskatchewan and Alberta before he lost his sight. He will be deeply missed by his friends as well as by blind people throughout the country.

ILLINOIS

The Hadley Correspondence School for the Blind

Franklin Dean, director, 22 years in work for the Blind, died September 20, 1947. Franklin Dean, blind himself since the age of three, devoted his life to helping his fellow blind. For the last ten years of his life he was associated with the Hadley Correspondence School for the Blind. As instructor, field secretary, assistant director and director of this school, he gave himself unstintingly to the improvement of the blind through education and counsel. As consultant for the Veterans Administration of Chicago, he gave his constructive, personal help toward the rehabilitation and readjustment of more than ten per cent of our country's war blind of World War II. Franklin Dean's countless friends have sustained a great loss in his passing.

KENTUCKY

American Printing House for the Blind

Andrew C. Ellis, superintendent, in work for the blind 20 years, died May 25, 1947. The span of seventeen years covering Mr. Ellis' superintendency of the American Printing House for the Blind marked an unprecedented increase in the institution. Under his guidance, old departments were reorganized and revitalized, and new processes and procedures adopted. New departments, such as the manufacture of talking books, Braillewriters, large type books, etc., were added to the services offered by the Printing House. Among his most outstanding accomplishments was a fund-raising campaign which makes it possible to supply "The Reader's Digest" to any blind individual who would care to receive copies, and also the securing of sufficient funds to erect a modern factory type building to house the manufacturing processes of the institution. His leadership in all work for the blind was outstanding, and his enthusiasm and interest in the welfare of the Printing House often provoked the comment, "I think I never knew a man who was more devoted to his work." His passing will be long remembered.

Miss Nell Kinney, retired bindery worker, 63 years in this work, died February 14, 1947. Miss Kinney, one of the early graduates of the Kentucky School for the Blind, spent most of her adult

life as an employee of the Printing House. Related to many of the employees, she was "Aunt Nell" to all. Her years of faithful labor were an inspiration to everyone.

Owen McCann, Sr., retired slate-maker, 64 years in the work, died February 13, 1947. Mr. McCann came to the Printing House as office boy at the age of fifteen years, spending his entire working life at the institution. He was foreman of the Braille printing department for a number of years. When increasing age and ill health encroached on his physical powers, he took over the slate-making department, rather than retire. It was not until permanent failing health precented his further labors that he retired in January, 1945. A workman of rare skill, the products of his hands can be found in daily use throughout the country.

MISSOURI

St. Louis Society for the Blind

Miss Emily M. Spencer, executive secretary, 18 years in work for the blind, died January 31, 1947. "Miss Spencer, for the past eighteen years, labored faithfully and diligently among us to save sight, to promote the welfare of the blind and partially blind of metropolitan St. Louis, and to acquaint the seeing public of the physical, mental and recreational needs of the blind.—We, the men and women without sight, who benefitted so greatly from her kind ministrations, do here and now, express our deep sorrow at her going, our sincere gratitude for her untiring efforts in our behalf, and our abiding conviction that Miss Spencer's eighteen years of faithful service will stand as a vital and eloquent testimony of the good she has wrought for us."—

ROBERT H. THOMPSON, (Missouri)
Chairman

JOHN S. HERNDON, (Georgia)

FRANK JOHNS, JR., (Connecticut)

RHTems

REPORT OF COMMITTEE ON NOMINATIONS

The Committee on Nominations wishes to present the following nominations for officers of the A.A.I.B. for Biennium 1948-1950.

President:

Francis M. Andrews, Maryland.

First Vice-President:

F. E. Davis, American Printing House for the Blind.

Second Vice-President:

Neal F. Quimby, New Mexico.

Secretary-Treasurer:

Egbert N. Peeler, North Carolina.

Executive Committee:

Josef G. Cauffman, Chairman, Overbrook.

John C. Lysen, Minnesota.

Robert H. Thompson, Missouri.

Miss L. Elizabeth Oberly, Pittsburgh.

Miss Lena L. Lewis, Texas.

Respectfully submitted:

A. L. BROWN, Chairman, Colorado

JOHN W. EAKES, Mississippi

B. S. JOICE, Pittsburgh

J. C. LYSEN, Minnesota

C. J. SETTLES, Florida.

REPORT OF SECRETARY-TREASURER

1946-1948

RECEIPTS

July 1, 1946 Cash on Hand	$1,589.80	
Memberships, 1946-1948		
51 Schools—dues and assessments	1,665.00	
6 Libraries	60.00	
9 Commissions & Other Organizations	70.00	
4 Public Schools	60.25	
Sale of Proceedings	32.49	
Payment of dues in advance (Hadley Correspondence School)	5.00	$3,482.54

DISBURSEMENTS

1946					
June 25 The St. Louis Button Co. (500 Badges)	Check	No.	5	33.30	
Sept. 3 S. R. Larzelere, Inc. 1000 Letterheads & 500 Envelopes	"	"	6	21.50	
Sept. 3 Perkins Institution (Stenotype-Business Meeting 6-27-46	"	"	7	15.44	
1947				17.50)	
Jan. 27 Lyon & Armor, Inc. 800 Proceedings, 500 Envelopes	"	"	8	1,349.85)	
Jan. 27 Postage—PROCEEDINGS, etc.	"	"	9	21.94	
Feb. 17 Secretarial Office, first half of biennium	"	"	10	250.00	
July 8 M. E. Frampton—Spec. Com. Mtg., Baltimore	"	"	11	17.50	
July 15 Postage—500 3¢ stamps	"	"	12	15.03	
July 15 W. E. Allen, Expenses Com. Mtg., Baltimore	"	"	13	168.18	
July 15 Baltimore Reporting Agency (Stenotype)	"	"	14	72.00	
1948					
Feb. 24 St. Louis Button Co. (Names for Badges)	"	"	15	8.66	
April 27 Lyon & Armor Co. (500 Programs—Convention)	"	"	16	105.00	
May 19 Secretarial Office, second half of biennium	"	"	17	250.00	
May 19 Postage—100 3¢ stamps	"	"	18	3.00	2,348.90
Balance 6-1-48					$1,133.64

Josef G. Cauffman, Secretary-Treasurer

MEETING OF NEW EXECUTIVE COMMITTEE

June 24, 1948
Austin, Texas

Members Present:

Francis Andrews
F. E. Davis
Neal F. Quimby
Egbert N. Peeler
John C. Lysen
Robert H. Thompson
Miss Lena Lewis

Members Absent:

Josef G. Cauffman
Misss L. Elizabeth Oberly

On the motion of Mr. Quimby, seconded by Mr. Davis, the committee voted to accept the invitation of the Overbrook School for the Blind to hold the next meeting of the American Association of Instructors for the Blind at the Overbrook School in Philadelphia. It was agreed that the amount of the fee for board and lodging to be collected at the next meeting of the American Association of Instructors for the Blind be determined by the host school.

The Committee voted to continue the $3.00 registration fee. This was upon the motion of Mr. Quimby, seconded by Mr. Lysen.

Upon the motion of Mr. Quimby, seconded by Mr. Davis, the secretary was authorized to pay bills which have been approved and authorized by the Chairman of the Executive Committee.

HV1788 c.1
A
American Association of Instructors of the Blind, 1948

Date Due

HV1788 c.1
A
AUTHOR
American Association of Instruc-
TITLE
tors of the Blind, 1948

DATE LOANED	BORROWER'S NAME
	[illegible]